PB88-234166

Volatile Organic Compound Model-Quality Assurance and Sensitivity Testing (Version 1.8)

Radian Corp., Research Triangle Park, NC

Prepared for

Environmental Protection Agency
Research Triangle Park, NC

Jul 88

U.S. Department of Commerce
National Technical Information Service
NTIS

PB88-234166

EPA/600/8-88/088
July 1988

THE VOLATILE ORGANIC COMPOUND MODEL - QUALITY ASSURANCE AND SENSITIVITY TESTING
(VERSION 1.8)

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This study was conducted
in cooperation with the
National Acid Precipitation Assessment Program

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REPRODUCED BY
U.S. DEPARTMENT OF COMMERCE
National Technical Information Service
SPRINGFIELD, VA. 22161

TECHNICAL REPORT DATA

(Please read Instructions on the reverse before completing)

1. REPORT NO. EPA/600/8-88/088	2.	3. RECIPIENT'S ACCESSION NO. PB88-234166/AS

4. TITLE AND SUBTITLE The Volatile Organic Compound Model--Quality Assurance and Sensitivity Testing (Version 1.8)	5. REPORT DATE July 1988
	6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S) Mark S. Jennings (Digital Kinetics)* and Thomas E. Emmel	8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS Radian Corporation P.O. Box 13000 Research Triangle Park, North Carolina 27709	10. PROGRAM ELEMENT NO.
	11. CONTRACT/GRANT NO. 68-02-3994
12. SPONSORING AGENCY NAME AND ADDRESS **EPA, Office of Research and Development** **Air and Energy Engineering Research Laboratory** **Research Triangle Park, NC 27711**	13. TYPE OF REPORT AND PERIOD COVERED Final; 2/86 - 9/87
	14. SPONSORING AGENCY CODE **EPA/600/13**

15. SUPPLEMENTARY NOTES AEERL project officer is Larry G. Jones, Mail Drop 62, 919/541-7716. (*) Digital Kinetics, Inc., P.O. Box 758, La Honda, CA 94020.

16. ABSTRACT The report describes test runs of the Volatile Organic Compound Model (VOCM), Version 1.8. VOCM predicts future emission levels of volatile organic compounds (VOCs) by projecting uncontrolled base year emissions into the future. These projected emissions are then reduced by constraints to predict future controlled emissions of VOCs. VOCM is a program that runs on the IBM-PC series of computers. The VOCM test runs in the report were performed: (1) to verify that the calculations and operation of VOCM are in accordance with the specifications and design of the model, and (2) to exercise the model with actual data developed under the National Acid Precipitation Assessment Program. Test run results show that the model operates as designed. Test runs with NAPAP data predict an overall annual growth rate of VOC emissions for the U.S. of about 1.6% per year for the projection horizon of 1980 to 2010. An overall growth in VOC emission control costs of about 4.1% is also predicted.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS		b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group	
Pollution	Cost Estimates	Pollution Control	13B	05A, 14A
Organic Compounds		Stationary Sources	07C	
Volatility		Volatile Organic Compounds	20M	
Forecasting			14G	
Mathematical Models			12A	
Emission				

18. DISTRIBUTION STATEMENT **Release to Public**	19. SECURITY CLASS *(This Report)* **Unclassified**	21. NO. OF PAGES 225
	20. SECURITY CLASS *(This page)* **Unclassified**	22. PRICE A10 $25.95

EPA Form 2220-1 (9-73)

NOTICE

This document has been reviewed in accordance with U.S. Environmental Protection Agency policy and approved for publication. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

ABSTRACT

This report presents test runs of the Volatile Organic Compound Model (VOCM). VOCM predicts future emission levels of volatile organic compounds (VOC's) by projecting uncontrolled base year emissions into the future. These projected emissions are then reduced by constraints to predict future controlled emissions of VOC's. VOCM also provides for the prediction of VOC emission control costs. VOCM is a computer program that runs on the IBM-PC series of computers.

Development of VOCM was done in support of the National Acid Precipitation Assessment Program (NAPAP). NAPAP is developing a number of models to assist in determining the role of various pollutants and industrial sectors in acid rain deposition and damage. Radian Corporation has been retained by the Environmental Protection Agency to develop a model to predict future emission levels of VOC from the industrial sector. VOCM is a result of this development effort.

The test runs of VOCM in this report were performed to satisfy two objectives:

* To verify that the calculations and operation of VOCM are in accordance with the specifications and design of the model.

* To exercise the model with actual data developed under the NAPAP program.

The results of the test runs show that the model operates as designed. Test runs with NAPAP data predict an overall annual growth rate of VOC emissions for the U.S. of approximately 1.6 percent per year for the projection horizon of 1980 to 2010. An overall growth in VOC emission control costs of approximately 4.1 percent is also predicted.

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Chapter 1
INTRODUCTION

This report presents test runs of the Volatile Organic Compound Model (VOCM). VOCM predicts future emission levels of volatile organic compounds (VOC's) by projecting uncontrolled base year emissions into the future. These projected emissions are then reduced by constraints to predict future controlled emissions of VOC's. VOCM also provides for the prediction of VOC emission control costs. VOCM is a computer program that runs on the IBM-PC series of computers. All test runs in this report were made with VOCM Version 1.8.

Development of VOCM was done in support of the National Acid Precipitation Assessment Program (NAPAP). NAPAP is developing a number of models to assist in determining the role of various pollutants and industrial sectors in acid rain deposition and damage. Radian Corporation has been retained by the Environmental Protection Agency to develop a model to predict future emission levels of VOC from the industrial sector. VOCM is a result of this development effort.

The test runs of VOCM in this report were performed to satisfy two objectives:

1. To verify that the calculations in VOCM are being performed in accordance with the specifications and design of the model. Runs made with this objective are referred to as "QA test runs".

2. To exercise the model with actual data developed under the NAPAP program. Runs made with this objective are referred to as "NAPAP test runs".

Chapters 2 through 5 summarize the input data and results for the various QA and NAPAP test runs. Appendix A contains a region-by-region listing of the base case NAPAP test run as produced by VOCM. Appendix B contains nationwide summary listings for other NAPAP test runs.

Chapter 2
QUALITY ASSURANCE TEST RUNS

A number of quality assurance (QA) test runs were conducted to verify that VOCM produces results consistent with its design. This chapter describes these runs. Included are outputs produced by VOCM for each run; the outputs were selected to illustrate the function of VOCM being tested in each run.

The QA test runs exercised all fundamental model operations including:

- Growth of base year emissions.
- Application of constraints to emissions.
- Application of emission rollbacks.
- Computation of control costs.
- Aggregation of industrial categories.
- Proper use of defaults.

Because of the complexity of the model and number of possible modes and configurations, it is not possible to exhaustively test every possible combination of conditions. Instead, the QA test runs generally exercise individual functions of the software one at a time. Many additional test runs (such as the NAPAP test runs presented later in this report) have been made and the results subjected to detailed hand inspection. These test runs indicate that individual functions of the model are working correctly in concert.

Nineteen QA test runs were made. Table 2-1 provides a general summary of the input data used for each run. The following sections give further information about the test runs and provide outputs generated by VOCM.

CONSTANT GROWTH RATE TEST RUNS (1, 2, 3)

Three test runs were conducted to verify that VOCM correctly applies positive, zero, and negative growth rates to emissions. For these runs, a single industrial category

Table 2-1. Summary of Parameters for QA Runs

Run No.	No. Ind. Categories	No. Regions	Base Yr. Emis. (TPY)	Proj. Horiz	No. Constraints	No. Cst. Tables	Retire. Rate (%)	Growth Rate (%)
1	1	1	100	10	0	0	0	10
2	1	1	100	10	0	0	0	0
3	1	1	100	10	0	0	0	-10
4	1	1	100	20	0	0	0	10,0,-10,10
5	1	1	100	5	1[a]	0	10	10
6	1	1	100	10	1[a]	0	10	10
7	1	1	100	5	1[b]	0	10	10
8	1	1	100	10	1[b]	0	10	10
9	1	1	100	15	2[c]	0	0	10
10	1	1	100	15	2[d]	0	0	10
11	1	1	100	10	1[e]	0	10	10
12	1	1	100	10[f]	0	0	10	10
13	1	1	100	10	0	1[g]	0	0
14	1	1	100	10	0	1[g]	0	0
15	1	1	100	10	0	1[g]	0	0
16	1	1	100	10	0	1[g]	0	0
17	1	1	100	10	0	2[h]	0	0
18	10[i]	1	0	10	0	0	0	0
19	1	1	0	10	0	0	10[j]	10[j]

[a] Constraint requires 50% level of control, 100% penetration, base/target year of 1980, applicable to new emissions.

[b] Constraint requires 50% level of control, 100% penetration, base/target year of 1980, applicable to existing emissions.

[c] Constraint A: 50% level of control, 50% penetration, base/target year of 1985, applicable to new. Constraint B: 75% level of control, 75% penetration, base/target year of 1990, applicable to new.

[d] Same as above, but applicable to existing.

[e] Offset constraint requiring 20% offset, offset year of 1985, 50% level of control, 100% penetration, applicable to new emissions in non-attainment areas.

[f] Rollback required to 50% of 1985 emissions.

[g] Cost table establishes cost points of $100, $200, and $300/ton for control efficiencies of 40, 60, and 80 percent.

[h] Cost Table A establishes cost of $100/ton with priority of 0; Cost Table B establishes cost of $200/ton with priority of 9.

[i] Industrial categories 1-9 aggregated into three aggregated categories with category 10 unaggregated.

[j] Retirement and growth rates entered into defaults of global file only.

was specified with a projection horizon of ten years. Growth rates of +10, 0, and -10 percent were used.

Figures 2-1 through 2-3 are year-by-year projected emissions tables generated by VOCM for these runs. VOCM correctly causes emissions to increase or decline depending on the growth rate used.

STEPPED GROWTH RATE TEST RUN (4)

VOCM provides the capability to specify up to seven different growth rate periods during a projection horizon. This run specified four growth rate periods of five years each with rates of 10, 0, -10, and 10 percent.

Figure 2-4 is the year-by-year projected emissions table generated by VOCM. VOCM correctly used four different growth rates during the projection horizon; these growth rates caused emissions to increase and decline during the projection horizon.

SINGLE CONSTRAINT RUNS (5, 6, 7, 8)

Four runs were conducted involving the application of a single constraint to various segments of emissions. For all runs, the constraint specified a 50 percent level of control with a 100 percent penetration taking effect in the base year of the emissions (1980). Runs 5 and 6 specified that the constraint affects new emissions only while Runs 7 and 8 specified that the constraint affects existing emissions only. The projection horizon was varied from 5 years (Runs 5 and 7) to 10 years (Runs 6 and 8). The shorter projection horizon allowed some base year existing emissions to remain in the projection year. The longer horizon retired all emissions since the base year.

Figure 2-5 provides year-by-year projected emissions, constraints, and segment tables for Run 5. The projection year uncontrolled emissions of 161 tons were segmented into two segments - 50 tons were emissions existing in the base year while 111 tons were new since the base year. Since Run 5 specified that the constraint affects only new emissions, the 50 percent level of control was applied to the 111 tons only, resulting in total controlled emissions of 106 tons (50 + 111*0.5).

```
Year by Year Projected Emissions for Region 1, Industrial Category A, Attainment
Retirement Rate =    0.0 Percent, Frac of New Emissions =  100.0 Percent
-----------------------------------------------------------
Year   A+NA Emis Attn Emis Growth Rt  A+NA Chg  Attn Chg
       (tons/yr) (tons/yr) (percent) (tons/yr) (tons/yr)
-----------------------------------------------------------
1980        100.      100.     10.00       10.       10.
1981        110.      110.     10.00       11.       11.
1982        121.      121.     10.00       12.       12.
1983        133.      133.     10.00       13.       13.
1984        146.      146.     10.00       15.       15.
1985        161.      161.     10.00       16.       16.
1986        177.      177.     10.00       18.       18.
1987        195.      195.     10.00       19.       19.
1988        214.      214.     10.00       21.       21.
1989        236.      236.     10.00       24.       24.
1990        259.      259.
-----------------------------------------------------------
```

Figure 2-1. QA Run 1: Constant 10 Percent Growth Rate

```
Year by Year Projected Emissions for Region 1, Industrial Category A, Attainment
Retirement Rate =    0.0 Percent, Frac of New Emissions =  100.0 Percent
-----------------------------------------------------------
Year   A+NA Emis Attn Emis Growth Rt  A+NA Chg  Attn Chg
       (tons/yr) (tons/yr) (percent) (tons/yr) (tons/yr)
-----------------------------------------------------------
1980        100.      100.      0.00        0.        0.
1981        100.      100.      0.00        0.        0.
1982        100.      100.      0.00        0.        0.
1983        100.      100.      0.00        0.        0.
1984        100.      100.      0.00        0.        0.
1985        100.      100.      0.00        0.        0.
1986        100.      100.      0.00        0.        0.
1987        100.      100.      0.00        0.        0.
1988        100.      100.      0.00        0.        0.
1989        100.      100.      0.00        0.        0.
1990        100.      100.
-----------------------------------------------------------
```

Figure 2-2. QA Run 2: Constant 0 Percent Growth Rate

```
Year by Year Projected Emissions for Region 1, Industrial Category A, Attainment
Retirement Rate =    0.0 Percent, Frac of New Emissions =  100.0 Percent
-----------------------------------------------------------
Year   A+NA Emis Attn Emis Growth Rt  A+NA Chg  Attn Chg
       (tons/yr) (tons/yr) (percent) (tons/yr) (tons/yr)
-----------------------------------------------------------
1980        100.      100.    -10.00      -10.      -10.
1981         90.       90.    -10.00       -9.       -9.
1982         81.       81.    -10.00       -8.       -8.
1983         73.       73.    -10.00       -7.       -7.
1984         66.       66.    -10.00       -7.       -7.
1985         59.       59.    -10.00       -6.       -6.
1986         53.       53.    -10.00       -5.       -5.
1987         48.       48.    -10.00       -5.       -5.
1988         43.       43.    -10.00       -4.       -4.
1989         39.       39.    -10.00       -4.       -4.
1990         35.       35.
-----------------------------------------------------------
```

Figure 2-3. QA Run 3: Constant -10 Percent Growth Rate

```
Year by Year Projected Emissions for Region 1, Industrial Category A, Attainment
Retirement Rate =    0.0 Percent, Frac of New Emissions =  100.0 Percent
------------------------------------------------------
Year A+NA Emis Attn Emis Growth Rt  A+NA Chg  Attn Chg
      (tons/yr) (tons/yr) (percent) (tons/yr) (tons/yr)
------------------------------------------------------
1980      100.      100.     10.00       10.       10.
1981      110.      110.     10.00       11.       11.
1982      121.      121.     10.00       12.       12.
1983      133.      133.     10.00       13.       13.
1984      146.      146.     10.00       15.       15.
1985      161.      161.      0.00        0.        0.
1986      161.      161.      0.00        0.        0.
1987      161.      161.      0.00        0.        0.
1988      161.      161.      0.00        0.        0.
1989      161.      161.      0.00        0.        0.
1990      161.      161.    -10.00      -16.      -16.
1991      145.      145.    -10.00      -14.      -14.
1992      130.      130.    -10.00      -13.      -13.
1993      117.      117.    -10.00      -12.      -12.
1994      106.      106.    -10.00      -11.      -11.
1995       95.       95.     10.00       10.       10.
1996      105.      105.     10.00       10.       10.
1997      115.      115.     10.00       12.       12.
1998      127.      127.     10.00       13.       13.
1999      139.      139.     10.00       14.       14.
2000      153.      153.
------------------------------------------------------
```

Figure 2-4. QA Run 4: Stepped Growth Run

```
Year by Year Projected Emissions for Region 1, Industrial Category A, Attainment
Retirement Rate =   10.0 Percent, Frac of New Emissions =  100.0 Percent
------------------------------------------------------
Year A+NA Emis Attn Emis Growth Rt  A+NA Chg  Attn Chg
      (tons/yr) (tons/yr) (percent) (tons/yr) (tons/yr)
------------------------------------------------------
1980      100.      100.     10.00       10.       10.
1981      110.      110.     10.00       11.       11.
1982      121.      121.     10.00       12.       12.
1983      133.      133.     10.00       13.       13.
1984      146.      146.     10.00       15.       15.
1985      161.      161.
------------------------------------------------------

Constraint Table for Region 1, Industrial Category A, Attainment
----------------------------------------------------------------------------------------------------------------
Constrt    Beg Yr     Target Yr  Off Level       LOC   Penetra  Appl Ex? Appl New?  C Yr Tot   P Yr Ex  P Yr New
Sht Num                          (percent) (percent) (percent)                      (tons/yr) (tons/yr) (tons/yr)
----------------------------------------------------------------------------------------------------------------
1          1980       1980         -100.00     50.00    100.00     FALSE      TRUE      100.       50.      111.
0          1980       1980         -100.00      0.00    100.00     TRUE       FALSE     100.       50.      111.
----------------------------------------------------------------------------------------------------------------

Segment Table for Region 1, Industrial Category A, Attainment
-------------------------------------------------------------------------------------------
Segment      Seg Emis Applicable                                          Agg LOC Constr Em
Number      (tons/yr) Constraints                                        (percent) (tons/yr)
-------------------------------------------------------------------------------------------
1                 50.   0                                                    0.00       50.
2                  0.   0    1                                              50.00        0.
3                111.   1                                                   50.00       56.
-------------------------------------------------------------------------------------------
Total Constrained Emissions =       106.
```

Figure 2-5. QA Run 5: Single Constraint Affecting New With Short Horizon

Figure 2-6 provides the output generated for Run 6. This run was similar to Run 5, however, the projection horizon was ten years which resulted in complete retirement of all base year existing emissions. Thus, the entire projection year emissions of 259 tons were subject to the constraint. This resulted in total uncontrolled emissions of 130 tons (259*0.5).

Figure 2-7 provides the output generated for Run 7. This run was similar to Run 5, however, the constraint applied only to existing emissions. Thus, only the 50 tons of base year existing emissions were constrained. The final total uncontrolled emissions were 136 tons (50*0.5 +111).

Finally, Figure 2-8 provides the output generated by Run 8. This run applied a constraint to existing emissions with all base year existing emissions retired in the projection year. Since the constraint was not applicable to any emissions in the projection year, the total controlled emissions were simply the uncontrolled emissions in the projection year of 259 tons.

In the constraint tables for these runs, a constraint with sheet number of zero is listed. This constraint provides for applying the level of control existing in the base year to existing emissions. This constraint is always included to ensure that base year emissions in the projection year do not lose their existing level of control. If the "Require Existing Level of Control" option is enabled in the global sheet, this constraint will be applied to new emissions as well as existing emissions.

MULTIPLE CONSTRAINT RUNS (9, 10)

Two runs were conducted which specified two constraints with differing levels of control, penetration, and beginning/target years. The first constraint specified a level of control of 50 percent, 50 percent penetration, and beginning/target years of 1985. The second constraint specified a level of control of 75 percent, 75 percent penetration, and beginning/target years of 1990. The two runs differed in that the constraints for Run 8 were applicable to new emissions; Run 9 specified that the constraints were applicable to existing emissions. A zero retirement rate was specified to ensure that base year emissions remained in the projection year.

```
Year by Year Projected Emissions for Region 1, Industrial Category A, Attainment
Retirement Rate =   10.0 Percent, Frac of New Emissions =  100.0 Percent
-------------------------------------------------------
Year  A+NA Emis Attn Emis Growth Rt  A+NA Chg  Attn Chg
      (tons/yr) (tons/yr) (percent) (tons/yr) (tons/yr)
-------------------------------------------------------
1980       100.      100.     10.00       10.       10.
1981       110.      110.     10.00       11.       11.
1982       121.      121.     10.00       12.       12.
1983       133.      133.     10.00       13.       13.
1984       146.      146.     10.00       15.       15.
1985       161.      161.     10.00       16.       16.
1986       177.      177.     10.00       18.       18.
1987       195.      195.     10.00       19.       19.
1988       214.      214.     10.00       21.       21.
1989       236.      236.     10.00       24.       24.
1990       259.      259.
-------------------------------------------------------

Constraint Table for Region 1, Industrial Category A, Attainment
--------------------------------------------------------------------------------------------------------------
Constrt   Beg Yr    Target Yr  Off Level       LOC   Penetra  Appl Ex? Appl New?  C Yr Tot   P Yr Ex  P Yr New
Sht Num                        (percent) (percent) (percent)                     (tons/yr) (tons/yr) (tons/yr)
--------------------------------------------------------------------------------------------------------------
1         1980      1980         -100.00     50.00    100.00     FALSE     TRUE       100.        0.      259.
0         1980      1980         -100.00      0.00    100.00     TRUE      FALSE      100.        0.      259.
--------------------------------------------------------------------------------------------------------------

Segment Table for Region 1, Industrial Category A, Attainment
------------------------------------------------------------------------------------------
Segment     Seg Emis Applicable                                        Agg LOC Constr Em
Number     (tons/yr) Constraints                                     (percent) (tons/yr)
------------------------------------------------------------------------------------------
1                 0.   0                                                  0.00        0.
2                 0.   0   1                                             50.00        0.
3               259.   1                                                 50.00      130.
------------------------------------------------------------------------------------------
Total Constrained Emissions =       130.
```

Figure 2-6. QA Run 6: Single Constraint Affecting New With Long Horizon

```
Year by Year Projected Emissions for Region 1, Industrial Category A, Attainment
Retirement Rate =   10.0 Percent, Frac of New Emissions =  100.0 Percent
-------------------------------------------------------
Year  A+NA Emis Attn Emis Growth Rt  A+NA Chg  Attn Chg
      (tons/yr) (tons/yr) (percent) (tons/yr) (tons/yr)
-------------------------------------------------------
1980       100.      100.     10.00       10.       10.
1981       110.      110.     10.00       11.       11.
1982       121.      121.     10.00       12.       12.
1983       133.      133.     10.00       13.       13.
1984       146.      146.     10.00       15.       15.
1985       161.      161.
-------------------------------------------------------

Constraint Table for Region 1, Industrial Category A, Attainment
--------------------------------------------------------------------------------------------------------------
Constrt   Beg Yr    Target Yr  Off Level       LOC   Penetra  Appl Ex? Appl New?  C Yr Tot   P Yr Ex  P Yr New
Sht Num                        (percent) (percent) (percent)                     (tons/yr) (tons/yr) (tons/yr)
--------------------------------------------------------------------------------------------------------------
1         1980      1980         -100.00     50.00    100.00     TRUE      FALSE      100.       50.      111.
0         1980      1980         -100.00      0.00    100.00     TRUE      FALSE      100.       50.      111.
--------------------------------------------------------------------------------------------------------------

Segment Table for Region 1, Industrial Category A, Attainment
------------------------------------------------------------------------------------------
Segment     Seg Emis Applicable                                        Agg LOC Constr Em
Number     (tons/yr) Constraints                                     (percent) (tons/yr)
------------------------------------------------------------------------------------------
1                50.   1   0                                             50.00       25.
2                 0.   0                                                  0.00        0.
3               111.                                                      0.00      111.
------------------------------------------------------------------------------------------
Total Constrained Emissions =       136.
```

Figure 2-7. QA Run 7: Single Constraint Affecting Existing with Short Horizon

```
Year by Year Projected Emissions for Region 1, Industrial Category A, Attainment
Retirement Rate =   10.0 Percent, Frac of New Emissions =  100.0 Percent
-------------------------------------------------------
Year  A+NA Emis Attn Emis Growth Rt  A+NA Chg  Attn Chg
      (tons/yr) (tons/yr) (percent) (tons/yr) (tons/yr)
-------------------------------------------------------
1980       100.      100.     10.00       10.       10.
1981       110.      110.     10.00       11.       11.
1982       121.      121.     10.00       12.       12.
1983       133.      133.     10.00       13.       13.
1984       146.      146.     10.00       15.       15.
1985       161.      161.     10.00       16.       16.
1986       177.      177.     10.00       18.       18.
1987       195.      195.     10.00       19.       19.
1988       214.      214.     10.00       21.       21.
1989       236.      236.     10.00       24.       24.
1990       259.      259.
-------------------------------------------------------

Constraint Table for Region 1, Industrial Category A, Attainment
--------------------------------------------------------------------------------------------------------------
Constrt   Beg Yr    Target Yr  Off Level       LOC  Penetra  Appl Ex? Appl New?  C Yr Tot   P Yr Ex  P Yr New
Sht Num                        (percent) (percent) (percent)                    (tons/yr) (tons/yr) (tons/yr)
--------------------------------------------------------------------------------------------------------------
1         1980      1980         -100.00     50.00    100.00     TRUE      FALSE      100.        0.      259.
0         1980      1980         -100.00      0.00    100.00     TRUE      FALSE      100.        0.      259.
--------------------------------------------------------------------------------------------------------------

Segment Table for Region 1, Industrial Category A, Attainment
------------------------------------------------------------------------------------------
Segment     Seg Emis Applicable                                Agg LOC Constr Em
Number     (tons/yr) Constraints                             (percent) (tons/yr)
------------------------------------------------------------------------------------------
1                 0.   1   0                                     50.00        0.
2                 0.   0                                          0.00        0.
3               259.                                              0.00      259.
------------------------------------------------------------------------------------------
Total Constrained Emissions =       259.
```

Figure 2-8. QA Run 8: Single Constraint Affecting Existing With Long Horizon

Figure 2-9 presents the outputs generated for Run 9. Four segments of emissions were created. The first segment was the base year emissions of 100 tons since there was no retirement of base year emissions; no constraints were applicable to this segment. The second segment was the new emissions coming on-line between the base year (1980) and the year of the first constraint (1985); no constraints were applicable to this segment. The third segment was the new emissions coming on-line between the year of the first constraint (1985) and the year of the second constraint (1990); only the first constraint is applicable to this segment, resulting in an overall level of control of 25 percent (0.5 level of control * 0.5 penetration). Finally, the fourth segment was the emissions coming on-line after the beginning year of the second constraint (1990); both constraints are applicable to these emissions resulting in an overall level of control of 56 percent (0.75 level of control * 0.75 penetration).

Figure 2-10 presents the results of Run 10. This run is identical to Run 9 except that the constraints are applicable to existing emissions rather than new emissions. This causes a reversal in the applicability of constraints to segments of emissions; the first segment is constrained by both constraints while the fourth segment is unconstrained.

OFFSET CONSTRAINT RUN (11)

QA Test Run 11 specified a single offset constraint. This constraint required that all new emissions since the year of the constraint (1985) obtain emission reductions equal to their controlled emissions plus an additional offset of 20 percent.

Figure 2-11 presents the results of this run. An emission segment of 98 tons (emissions which came on line after the constraint took effect in 1985) were subject to the offset constraint. Since the constraint required 50 percent control, the additional offset emissions required were the controlled emissions under the constraint of 49 tons (98*0.5) times the offset level of 20 percent, or 10 tons (49*0.2). Thus, the emissions from the segment were -10 tons. These negative emissions were obtained from other segments.

```
Year by Year Projected Emissions for Region 1, Industrial Category A, Attainment
Retirement Rate =    0.0 Percent, Frac of New Emissions =  100.0 Percent
-------------------------------------------------------
Year  A+NA Emis Attn Emis Growth Rt  A+NA Chg  Attn Chg
      (tons/yr) (tons/yr) (percent) (tons/yr) (tons/yr)
-------------------------------------------------------
1980       100.      100.     10.00       10.       10.
1981       110.      110.     10.00       11.       11.
1982       121.      121.     10.00       12.       12.
1983       133.      133.     10.00       13.       13.
1984       146.      146.     10.00       15.       15.
1985       161.      161.     10.00       16.       16.
1986       177.      177.     10.00       18.       18.
1987       195.      195.     10.00       19.       19.
1988       214.      214.     10.00       21.       21.
1989       236.      236.     10.00       24.       24.
1990       259.      259.     10.00       26.       26.
1991       285.      285.     10.00       29.       29.
1992       314.      314.     10.00       31.       31.
1993       345.      345.     10.00       35.       35.
1994       380.      380.     10.00       38.       38.
1995       418.      418.
-------------------------------------------------------

Constraint Table for Region 1, Industrial Category A, Attainment
--------------------------------------------------------------------------------------------------------------
Constrt   Beg Yr     Target Yr  Off Level       LOC   Penetra  Appl Ex? Appl New?  C Yr Tot   P Yr Ex  P Yr New
Sht Num                        (percent) (percent) (percent)                     (tons/yr) (tons/yr) (tons/yr)
--------------------------------------------------------------------------------------------------------------
0         1980      1980         -100.00      0.00    100.00     TRUE      FALSE       100.      100.      318.
1         1985      1985         -100.00     50.00     50.00     FALSE     TRUE        161.      161.      257.
2         1990      1990         -100.00     75.00     75.00     FALSE     TRUE        259.      259.      158.
--------------------------------------------------------------------------------------------------------------

Segment Table for Region 1, Industrial Category A, Attainment
------------------------------------------------------------------------------------------
Segment     Seg Emis Applicable                                Agg LOC Constr Em
Number     (tons/yr) Constraints                             (percent) (tons/yr)
------------------------------------------------------------------------------------------
1               100.   0                                          0.00      100.
2                61.                                              0.00       61.
3                98.   1                                         25.00       74.
4               158.   1     2                                   56.25       69.
------------------------------------------------------------------------------------------
Total Constrained Emissions =       304.
```

Figure 2-9. QA Run 9: Multiple Constraints Affecting New Emissions

```
Year by Year Projected Emissions for Region 1, Industrial Category A, Attainment
Retirement Rate =    0.0 Percent, Frac of New Emissions =  100.0 Percent
-------------------------------------------------------
Year  A+NA Emis Attn Emis Growth Rt  A+NA Chg  Attn Chg
      (tons/yr) (tons/yr) (percent) (tons/yr) (tons/yr)
-------------------------------------------------------
1980         100.      100.     10.00       10.       10.
1981         110.      110.     10.00       11.       11.
1982         121.      121.     10.00       12.       12.
1983         133.      133.     10.00       13.       13.
1984         146.      146.     10.00       15.       15.
1985         161.      161.     10.00       16.       16.
1986         177.      177.     10.00       18.       18.
1987         195.      195.     10.00       19.       19.
1988         214.      214.     10.00       21.       21.
1989         236.      236.     10.00       24.       24.
1990         259.      259.     10.00       26.       26.
1991         285.      285.     10.00       29.       29.
1992         314.      314.     10.00       31.       31.
1993         345.      345.     10.00       35.       35.
1994         380.      380.     10.00       38.       38.
1995         418.      418.
-------------------------------------------------------

Constraint Table for Region 1, Industrial Category A, Attainment
--------------------------------------------------------------------------------------------------------------
Constrt   Beg Yr    Target Yr  Off Level        LOC  Penetra  Appl Ex? Appl New?  C Yr Tot   P Yr Ex  P Yr New
Sht Num                        (percent) (percent) (percent)                     (tons/yr) (tons/yr) (tons/yr)
--------------------------------------------------------------------------------------------------------------
0         1980      1980         -100.00       0.00   100.00     TRUE      FALSE      100.      100.      318.
1         1985      1985         -100.00      75.00    75.00     TRUE      FALSE      161.      161.      257.
2         1990      1990         -100.00      50.00    50.00     TRUE      FALSE      259.      259.      158.
--------------------------------------------------------------------------------------------------------------

Segment Table for Region 1, Industrial Category A, Attainment
------------------------------------------------------------------------------------------
Segment     Seg Emis Applicable                                  Agg LOC Constr Em
Number     (tons/yr) Constraints                               (percent) (tons/yr)
------------------------------------------------------------------------------------------
1               100.   2   1   0                                 56.25       44.
2                61.   2   1                                     56.25       27.
3                98.   2                                         25.00       74.
4               158.                                              0.00      158.
------------------------------------------------------------------------------------------
Total Constrained Emissions =       303.
```

Figure 2-10. QA Run 10: Multiple Constraints Affecting Existing Emissions

```
Year by Year Projected Emissions for Region 1, Industrial Category A, Non-Attainment
Retirement Rate =    0.0 Percent, Frac of New Emissions =  100.0 Percent
-------------------------------------------------------
Year  A+NA Emis   NA Emis Growth Rt  A+NA Chg    NA Chg
      (tons/yr) (tons/yr) (percent) (tons/yr) (tons/yr)
-------------------------------------------------------
1980       100.      100.     10.00       10.       10.
1981       110.      110.     10.00       11.       11.
1982       121.      121.     10.00       12.       12.
1983       133.      133.     10.00       13.       13.
1984       146.      146.     10.00       15.       15.
1985       161.      161.     10.00       16.       16.
1986       177.      177.     10.00       18.       18.
1987       195.      195.     10.00       19.       19.
1988       214.      214.     10.00       21.       21.
1989       236.      236.     10.00       24.       24.
1990       259.      259.
-------------------------------------------------------

Constraint Table for Region 1, Industrial Category A, Non-Attainment
--------------------------------------------------------------------------------------------------------------
Constrt   Beg Yr    Target Yr  Off Level       LOC   Penetra  Appl Ex? Appl New?  C Yr Tot   P Yr Ex  P Yr New
Sht Num                        (percent) (percent) (percent)                     (tons/yr) (tons/yr) (tons/yr)
--------------------------------------------------------------------------------------------------------------
0         1980      1980         -100.00      0.00    100.00     TRUE      FALSE      100.      100.      159.
1         1985      1985           20.00     50.00    100.00     FALSE     TRUE       161.      161.       98.
--------------------------------------------------------------------------------------------------------------

Segment Table for Region 1, Industrial Category A, Non-Attainment
------------------------------------------------------------------------------------------
Segment     Seg Emis Applicable                                Agg LOC Constr Em
Number     (tons/yr) Constraints                             (percent) (tons/yr)
------------------------------------------------------------------------------------------
1               100.   0                                          0.00      100.
2                61.                                              0.00       61.
3                98.   1                                        110.00      -10.
------------------------------------------------------------------------------------------
Total Constrained Emissions =       151.
```

Figure 2-11. QA Run 11: Offset Constraint Run

ROLLBACK RUN (12)

The rollback test run specified that emissions in the projection year of 1990 must not exceed 50 percent of the emissions in 1985.

Figure 2-12 presents the outputs generated by VOCM. Two separate sets of emissions, constraints, and segment tables were generated - one set was for the rollback year of 1985 and the other was for the projection year of 1990. The 1985 predicted emissions were 161 tons, therefore, the rollback ceiling for subsequent years was 81 tons (161*0.5). The 1990 emissions without rollback were 259 tons. Because the projected emissions for 1990 are greater than the rollback ceiling, the rollback took effect and the final controlled emissions were 81 tons.

SINGLE COST TABLE RUNS (13, 14, 15, 16)

Four runs were made to check for proper interpolation in cost tables. A single cost table was specified with cost effectiveness values of $100, $200, and $300 per ton of emissions for control efficiencies of 40, 60 and 80 percent. The four runs required levels of control of 30, 50, 70, and 90 percent in the base year.

Figures 2-13 through 2-16 present regional results for both emissions and costs. VOCM interpolated into each table, picking the lowest efficiency that was equal or greater than the required level of control. In the case of Run 16, the required level of control was greater than the highest efficiency in the table; in this case, VOCM picked the highest efficiency.

MULTIPLE COST TABLE RUN (17)

When more than one cost table is applicable to an industrial category, VOCM picks the table with the highest priority. Run 17 defined two cost tables each with a single cost point. The first table specified a cost effectiveness of $100/ton with a priority of zero. The second table specified a cost effectiveness of $200/ton with a priority of nine.

```
Year by Year Projected Emissions for Region 1, Industrial Category A, Attainment
Retirement Rate =    0.0 Percent, Frac of New Emissions =  100.0 Percent
-------------------------------------------------------
Year  A+NA Emis Attn Emis Growth Rt  A+NA Chg  Attn Chg
      (tons/yr) (tons/yr) (percent) (tons/yr) (tons/yr)
-------------------------------------------------------
1980       100.      100.     10.00       10.       10.
1981       110.      110.     10.00       11.       11.
1982       121.      121.     10.00       12.       12.
1983       133.      133.     10.00       13.       13.
1984       146.      146.     10.00       15.       15.
1985       161.      161.
-------------------------------------------------------

Constraint Table for Region 1, Industrial Category A, Attainment
-------------------------------------------------------------------------------------------------------------
Constrt    Beg Yr      Target Yr  Off Level       LOC   Penetra  Appl Ex? Appl New?  C Yr Tot   P Yr Ex  P Yr New
Sht Num                           (percent) (percent) (percent)                     (tons/yr) (tons/yr) (tons/yr)
-------------------------------------------------------------------------------------------------------------
0          1980        1980         -100.00      0.00    100.00     TRUE      FALSE       100.      100.       61.
-------------------------------------------------------------------------------------------------------------

Segment Table for Region 1, Industrial Category A, Attainment
-------------------------------------------------------------------------------------------
Segment      Seg Emis Applicable                                       Agg LOC Constr Em
Number      (tons/yr) Constraints                                    (percent) (tons/yr)
-------------------------------------------------------------------------------------------
1                100.   0                                                 0.00      100.
2                 61.                                                     0.00       61.
-------------------------------------------------------------------------------------------
Total Constrained Emissions =        161.

Year by Year Projected Emissions for Region 1, Industrial Category A, Attainment
Retirement Rate =    0.0 Percent, Frac of New Emissions =  100.0 Percent
-------------------------------------------------------
Year  A+NA Emis Attn Emis Growth Rt  A+NA Chg  Attn Chg
      (tons/yr) (tons/yr) (percent) (tons/yr) (tons/yr)
-------------------------------------------------------
1980       100.      100.     10.00       10.       10.
1981       110.      110.     10.00       11.       11.
1982       121.      121.     10.00       12.       12.
1983       133.      133.     10.00       13.       13.
1984       146.      146.     10.00       15.       15.
1985       161.      161.     10.00       16.       16.
1986       177.      177.     10.00       18.       18.
1987       195.      195.     10.00       19.       19.
1988       214.      214.     10.00       21.       21.
1989       236.      236.     10.00       24.       24.
1990       259.      259.
-------------------------------------------------------

Constraint Table for Region 1, Industrial Category A, Attainment
-------------------------------------------------------------------------------------------------------------
Constrt    Beg Yr      Target Yr  Off Level       LOC   Penetra  Appl Ex? Appl New?  C Yr Tot   P Yr Ex  P Yr New
Sht Num                           (percent) (percent) (percent)                     (tons/yr) (tons/yr) (tons/yr)
-------------------------------------------------------------------------------------------------------------
0          1980        1980         -100.00      0.00    100.00     TRUE      FALSE       100.      100.      159.
-------------------------------------------------------------------------------------------------------------

Segment Table for Region 1, Industrial Category A, Attainment
-------------------------------------------------------------------------------------------
Segment      Seg Emis Applicable                                       Agg LOC Constr Em
Number      (tons/yr) Constraints                                    (percent) (tons/yr)
-------------------------------------------------------------------------------------------
1                100.   0                                                 0.00      100.
2                159.                                                     0.00      159.
-------------------------------------------------------------------------------------------
Total Constrained Emissions =        259.

Results of Emission Projection for Region  1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 12:44 PM, Thursday August 27, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year - 1980                       |                  Proj Year - 1990                    |
ID         |  Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr      LOC |  Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
-----------------------------------------------------------------------------------------------------------------------------
A          |        100       100         0         0      100    0.0 |        259        81         0         0       81  69.0 |   -19.5
-----------------------------------------------------------------------------------------------------------------------------
           |        100       100         0         0      100    0.0 |        259        81         0         0       81  69.0 |   -19.5
```

Figure 2-12. QA Run 12: Rollback Test Run

```
Results of Emission Projection for Region  1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.0 - 6/23/87 - Time of Run: 12:59 PM, Thursday August 27, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat      |                  Base Year - 1980                  |                  Proj Year - 1990                  |
ID           | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
A            |      100       70        0         0       70   30.0 |      100       70        0         0       70   30.0 |    0.0
------------------------------------------------------------------------------------------------------------------------
             |      100       70        0         0       70   30.0 |      100       70        0         0       70   30.0 |    0.0

Results of Cost Analysis for Region 1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.0 - 6/23/87 - Time of Run: 12:59 PM, Thursday August 27, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
------------------------------------------------------------------------------------------------------
Ind Cat      |         Base Year - 1980          |         Proj Year - 1990          |
ID           |       Cost    Emis Red   Cost Eff |       Cost    Emis Red   Cost Eff |     Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------
A            |      3000.         30.       100. |      3000.         30.       100. |          0.         0.0
------------------------------------------------------------------------------------------------------
             |      3000.         30.       100. |      3000.         30.       100. |          0.         0.0
```

Figure 2-13. QA Run 13: Single Cost Run Selecting Low Cost

```
Results of Emission Projection for Region  1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.0 - 6/23/87 - Time of Run:  9:27 AM, Friday August 28, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat      |                  Base Year - 1980                  |                  Proj Year - 1990                  |
ID           | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
A            |      100       50        0         0       50   50.0 |      100       50        0         0       50   50.0 |    0.0
------------------------------------------------------------------------------------------------------------------------
             |      100       50        0         0       50   50.0 |      100       50        0         0       50   50.0 |    0.0

Results of Cost Analysis for Region 1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.0 - 6/23/87 - Time of Run:  9:27 AM, Friday August 28, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
------------------------------------------------------------------------------------------------------
Ind Cat      |         Base Year - 1980          |         Proj Year - 1990          |
ID           |       Cost    Emis Red   Cost Eff |       Cost    Emis Red   Cost Eff |     Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------
A            |     10000.         50.       200. |     10000.         50.       200. |          0.         0.0
------------------------------------------------------------------------------------------------------
             |     10000.         50.       200. |     10000.         50.       200. |          0.         0.0
```

Figure 2-14. QA Run 14: Single Cost Run Selecting Medium Cost

```
Results of Emission Projection for Region  1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.0 - 6/23/87 - Time of Run:  9:28 AM, Friday August 28, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year - 1980                    |                 Proj Year - 1990                    |
ID         |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
A          |       100       30        0         0        30  70.0 |       100       30        0         0        30  70.0 |    0.0
------------------------------------------------------------------------------------------------------------------------------
           |       100       30        0         0        30  70.0 |       100       30        0         0        30  70.0 |    0.0

Results of Cost Analysis for Region 1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.0 - 6/23/87 - Time of Run:  9:28 AM, Friday August 28, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat    |        Base Year - 1980           |          Proj Year - 1990          |
ID         |       Cost    Emis Red   Cost Eff |       Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------
A          |     21000.         70.       300. |     21000.         70.       300. |           0.        0.0
---------------------------------------------------------------------------------------------------------
           |     21000.         70.       300. |     21000.         70.       300. |           0.        0.0
```

Figure 2-15. QA Run 15: Single Cost Run Selecting High Cost

```
Results of Emission Projection for Region  1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.0 - 6/23/87 - Time of Run:  9:28 AM, Friday August 28, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year - 1980                    |                 Proj Year - 1990                    |
ID         |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
A          |       100       10        0         0        10  90.0 |       100       10        0         0        10  90.0 |    0.0
------------------------------------------------------------------------------------------------------------------------------
           |       100       10        0         0        10  90.0 |       100       10        0         0        10  90.0 |    0.0

Results of Cost Analysis for Region 1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.0 - 6/23/87 - Time of Run:  9:28 AM, Friday August 28, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat    |        Base Year - 1980           |          Proj Year - 1990          |
ID         |       Cost    Emis Red   Cost Eff |       Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------
A          |     27000.         90.       300. |     27000.         90.       300. |           0.        0.0
---------------------------------------------------------------------------------------------------------
           |     27000.         90.       300. |     27000.         90.       300. |           0.        0.0
```

Figure 2-16. QA Run 16: Single Cost Run Selecting Very High Cost

Figure 2-17 presents regional emissions and cost results. VOCM chose the second cost table with the higher cost since this table had a higher priority.

AGGREGATION RUN (18)

Run 18 involved ten industrial categories (with ID's of '1' through '10') aggregated into three aggregate categories (with ID's of 'A', 'B', and 'C'). The first nine industrial categories were aggregated into the aggregate categories while Industrial Category 10 was left unaggregated.

Figure 2-18 presents the regional emissions results for this run. The nine industrial categories were aggregated correctly, while the remaining industrial category was reported separately.

DEFAULT RUN (19)

Run 19 projected a single industrial category with no growth or retirement rates specified in the growth and retirement files. Default growth and retirement rates of 10 percent were specified in the global file.

Figure 2-19 presents the regional projection details table for this run. VOCM correctly used the default rates and noted the use of defaults in the "Special Notes" column.

Figure 2-17 presents regional emissions and cost results. VOCM chose the second cost table with the higher cost since this table had a higher priority.

AGGREGATION RUN (18)

Run 18 involved ten industrial categories (with ID's of '1' through '10') aggregated into three aggregate categories (with ID's of 'A', 'B', and 'C'). The first nine industrial categories were aggregated into the aggregate categories while Industrial Category 10 was left unaggregated.

Figure 2-18 presents the regional emissions results for this run. The nine industrial categories were aggregated correctly, while the remaining industrial category was reported separately.

DEFAULT RUN (19)

Run 19 projected a single industrial category with no growth or retirement rates specified in the growth and retirement files. Default growth and retirement rates of 10 percent were specified in the global file.

Figure 2-19 presents the regional projection details table for this run. VOCM correctly used the default rates and noted the use of defaults in the "Special Notes" column.

```
Results of Emission Projection for Region  1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:35 AM, Friday August 28, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------------
Ind Cat      |                   Base Year - 1980                      |                   Proj Year - 1990                     |
ID           |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr     LOC |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr     LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------------
A            |       100       50        0         0       50    50.0 |       100       50        0         0       50    50.0 |    0.0
-------------------------------------------------------------------------------------------------------------------------------------
             |       100       50        0         0       50    50.0 |       100       50        0         0       50    50.0 |    0.0
Results of Cost Analysis for Region 1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:35 AM, Friday August 28, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------
Ind Cat      |         Base Year - 1980              |           Proj Year - 1990             |
ID           |          Cost    Emis Red    Cost Eff |           Cost    Emis Red    Cost Eff |       Abs Chg     Prct Chg
-----------------------------------------------------------------------------------------------------------------------
A            |        10000.         50.        200. |         10000.         50.        200. |            0.          0.0
-----------------------------------------------------------------------------------------------------------------------
             |        10000.         50.        200. |         10000.         50.        200. |            0.          0.0
```

Figure 2-17. QA Test Run 17: Multiple Cost Tables Selecting Highest Priority

```
Results of Emission Projection for Region  1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:41 AM, Friday August 28, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------------
Ind Cat      |                   Base Year - 1980                      |                   Proj Year - 1990                     |
ID           |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr     LOC |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr     LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------------
A            |         0        0        0         0        0     0.0 |         0        0        0         0        0     0.0 |    0.0
B            |         0        0        0         0        0     0.0 |         0        0        0         0        0     0.0 |    0.0
C            |         0        0        0         0        0     0.0 |         0        0        0         0        0     0.0 |    0.0
10           |         0        0        0         0        0     0.0 |         0        0        0         0        0     0.0 |    0.0
-------------------------------------------------------------------------------------------------------------------------------------
             |         0        0        0         0        0     0.0 |         0        0        0         0        0     0.0 |    0.0
```

Figure 2-18. QA Test Run 18: Aggregation Run

```
Details of Emission Projection for Region 1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:44 AM, Friday August 28, 1987
Defaults:  Growth = 10.0  %     Retire Rate = 10.0  %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------
Ind Cat      |    Retire   Overall   Overall      Attn   No Appl | Special
ID           |      Rate Grth-Attn   Grth-NA  Fraction    Constr | Notes
-------------------------------------------------------------------------------------
A            |      10.0      10.0       0.0     100.0         0 | 23
-------------------------------------------------------------------------------------
```

Figure 2-19. QA Test Run 19: Default Run

Chapter 3
DESCRIPTION OF INPUT DATA USED FOR NAPAP TEST RUNS

In addition to the QA test runs discussed in the previous section, preliminary VOCM runs were made with actual NAPAP data. These runs were essentially "dry runs" of the model preliminary to integration of the model with other NAPAP activities.

VOCM requires a number of input data files. This chapter describes the general content and purpose of each file and briefly describes the development of each data file for the NAPAP test runs presented in this report. Considerably more detailed information is presented in the reports identified in the Introduction.

The input data files used by VOCM are as follows:

Base Year Emissions	A file of uncontrolled and controlled emission rates (tons per year) for 101 industrial categories in 49 states (continental U.S. and the District of Columbia). The runs presented in this report use 1980 as the base year of emissions since this is the base year of the NAPAP emissions inventory used.
Growth Rates	A file of growth rates (annual growth in uncontrolled emissions in percent/year) for each industrial category in each state for five-year time frames from the base year to the projection year.
Retirement Rates	A file of retirement rates (annual rate in which sources are replaced with new sources in percent/year) for each industrial category.
Constraint Data	A file defining emission limiting factors (typically regulations) that are expected to affect the growth of VOC emissions within the projection horizon.

Offset Data	A file defining offset levels (the additional emission offset required for new sources in non-attainment areas expressed as a percent of LAER controlled emissions) and offset years (the year when offsets are routinely required) for each state.
Cost Data	A file defining the costs of controlling VOC emissions (expressed as a series of cost effectiveness values in $/ton of VOC removed for various removal efficiencies) for each industrial category.
Aggregation Data	A file specifying how industrial categories are to be grouped in VOCM output. This assists interpreting VOCM results by reducing the number of industrial categories to a manageable number.

BASE YEAR EMISSIONS DATA FILE

VOCM projects future emissions of VOC by projecting known emissions in a base year into the future. The runs presented in this report used the NAPAP Version 3.0 emissions inventory as developed by Environmental Sciences. This inventory is a "snapshot" of national annual emissions levels in 1980. VOCM is capable of using any base year of data desired and it is anticipated that future runs will use a later version of the NAPAP inventory with a later base year.

The NAPAP emissions inventory identifies each emission source by EPA Standard Classification Code (SCC) - a code that classifies an emission source according to the type of industrial process that is involved. The number of unique SCC's covering all industrial VOC emission sources is estimated to be approximately 1000. This number is too large to be handled by VOCM. Instead, the inventory was segregated into a smaller number of categories (101). The categories were chosen such that processes with similar retirement rates, growth rates, regulatory constraints, and emission control costs were grouped.

Software was written to segregate the NAPAP SCC-based emissions into the categories used by VOCM. In addition, this software segregated the data by states. The result of this segregation process was a matrix of base year emissions with 4949 "cells" (101 industrial categories x 49 states) where each cell represents a single industrial category in a single state.

Because the types of regulations affecting attainment and non-attainment areas vary significantly, separate emission totals were kept for both area types. The NAPAP inventory reported a county number code for each emission source. A listing of counties in both attainment and non-attainment areas (as of 1980) was developed. With this information and the county codes for each source, emissions were split between attainment and non-attainment areas.

Three significant problems arose in using the NAPAP inventory:

1. NAPAP explicitly reported actual "stack" emissions; in many cases these emissions occurred downstream of a control device. Since VOCM was designed to project uncontrolled emissions (primarily so that constraints could be specified as a level of control over uncontrolled), a methodology was developed to compute uncontrolled emissions based on other data. This methodology essentially "back calculated" uncontrolled emissions based on the reported controlled emissions and reported control device efficiency.

2. NAPAP's "best estimate" of actual controlled emissions (which may have been based on emission test(s), emission factors, or other data) was reported at the point source level only. Over half of the point sources had multiple processes feeding into a single point source. In many cases, each of these processes was classified under a separate SCC. Each of these SCC's, in turn, may have been classified in a different VOCM category. An emission distribution technique was used to distribute the point source emissions back to each contributing process and SCC. This distributing technique used emission factor emissions (which were reported at the process/SCC level) as weights in distributing point source emissions.

3. The NAPAP inventory contained two basic classifications of emissions: point source and area source. By appropriate selection of SCC's it was possible to uniquely identify point source industrial VOC emissions. This was not possible for area source emissions which contain a large number of non-industrial emission sources. A separate study was undertaken to identify what portion of the area

source categories could be considered "industrial" in nature. The results of this study were used to develop the industrial emission portion of the area source categories.

By far the largest area source category was the "solvent purchased" category (101). This category accounted for consumption use of solvents (such as use of solvents in small industrial cleaning establishments, paint solvent evaporation, etc.) that was not accounted for in point source emissions. This category accounted for approximately 45 percent of all controlled industrial VOC emissions in the 1980 base year.

This category is, by nature, distributed and not well-defined. No data was available to develop constraints for this category. To determine the effect of this category on results, a sensitivity run was conducted without this category in the base year emissions data.

GROWTH RATE DATA FILE

VOCM provides for separate growth rates for each industrial category in each state for up to seven discrete time periods within the projection horizon. This matrix of growth data is relatively large, resulting in nearly 35,000 separate growth rates (101 industrial categories x 49 states x 7 time periods) that are used in each model run. Growth rates used in VOCM were developed by Argonne National Laboratories (ANL) in conjunction with the development of growth rates and scenarios for other NAPAP models. Growth rates were provided for five-year increments from 1980 to 2000 and ten-year increments from 2000 to 2030. Although VOCM is capable of projecting up to 70 years beyond the base year, the runs in this report used a projection horizon of 30 years; thus the maximum projection year is 2010.

Three growth rate scenarios were provided by ANL for the runs in this report. The first, called the "reference growth scenario", assumes moderate overall economic growth and is considered the most likely growth scenario. The second, called the "low growth scenario", assumes relatively low overall economic growth and is considered a reasonable lower bound on growth. The third, called the "high growth scenario", assumes relatively high overall economic growth and is considered a reasonable upper bound on growth.

A key problem during development of growth rates was how to cross-reference various economic driver data to the industrial categories used by VOCM. The economic driver data used by ANL was organized by Standard Industrial Classification (SIC) - a classification scheme dissimilar to the the Standard Classification Code (SCC) used to define industrial categories in VOCM. To provide a cross-reference, Radian used the NAPAP emissions inventory which typically provides a SIC code for each point source. While reducing and segregating the NAPAP inventory (see previous discussion on base year emissions), the relative contribution of different SIC's, weighted by controlled emissions, to each of the 101 categories was computed. This data was reported to ANL and was used to cross-reference SIC-organized growth driver data to the appropriate SCC-organized VOC categories.

RETIREMENT RATE DATA FILE

The runs in this report used retirement rates based on I.R.S. depreciation guidelines. However, these guidelines typically allow for accelerated depreciation. To provide a more realistic estimate of equipment life, the I.R.S.equipment life quidelines were doubled. Each life was then converted to an annual rate of retirement by taking the reciprocal.

To cross-reference the 101 VOC industrial categories to I.R.S. equipment definitions, each category was reviewed and an appropriate I.R.S. category of equipment noted. In some cases where several items of equipment were represented in a single VOCM industrial category, an average of several equipment lives was used. For those categories in which a suitable I.R.S. category could not be determined, a default annual retirement rate of 3.33 percent was used.

CONSTRAINT DATA FILE

Radian has developed an extensive data base of constraints in support of VOCM. These constraints model the effects of NSPS, NESHAP, LAER, BACT, state, local and other regulatory programs. Approximately 160 constraints were used for the runs presented in this report. This included LAER constraints associated with the application of offsets in non-attainment areas (discussed below).

OFFSET DATA FILE

LAER constraints are applied to new sources in non-attainment areas and are typically associated with the application of an emission offset. This offset requires that any new sources in non-attainment areas procure from existing sources an emission reduction equal to their own controlled LAER emissions plus an additional offset. The offset is expressed as a percentage of their LAER controlled emissions. Offsets vary from state to state.

Although no development of a state offset data base was done in support of the runs in this report, offsets are now part of the permitting process in most states with offset levels generally in the range of 10 to 50 percent. A 20 percent offset level affecting all new emissions in non-attainment areas was used for the runs in this report with one exception. A sensitivity run was conducted in which LAER constraints were disabled and offsets were not applied.

COST DATA FILE

VOCM uses "cost curves" (defined by points on a cost per ton of VOC removed versus control efficiency curve) to compute the costs of controlling VOC emissions. A separate study was undertaken to develop these cost curves from BID's, CTG's, and other EPA regulatory development documents. This study provided both costs for new facilities and for retrofit situations where a control is installed in an existing facility. For the runs in this report, the two cost curves were averaged since the controls required to meet the projected control levels are likely to be a mixture of new and retrofit facilities. This averaging was facilitated by both cost curves having the same control efficiency points.

AGGREGATION DATA FILE

VOCM provides for aggregating (grouping) industrial categories so that results are more easily interpreted. All the runs in this report aggregate results in aggregated industrial categories as defined in Table 3-1.

VOCM does not currently provide any method to aggregate the results of several states together. However, regional aggregation was done by hand for the base case run. The four regions of the U.S. defined were: East, Midwest, Southwest, and West. Figure 3-1 provides a map defining these regions.

Table 3-1. Aggregated Industrial Category Definitions

Aggregated Category	Contributing Industrial Categories
Petroleum Processing	Crude Oil Production (1,2) Petroleum Storage (3-7) Petroleum Refining (8-14) Petroleum Marketing (15-18)
Chemical Manufacturing	SOCMI (19-33) Misc. Chemical Industries (34-43)
Fuel Combustion	In-Process Fuel Use (56-59) Ind. Boilers/Heaters (84-86) Ind. IC Engines (87) Misc. Fuel Comb. Area Sources (91-100)
Surface Coating/Cleaning	Adhesives (61) Solvent Cleaning (62,63) Misc. Surface Coating (64-82) Misc. Solvent Use (83)
Miscellaneous	Iron and Steel (44-49) Tobacco (50) Food (51) Textiles (52) Paper/Lumber (53,54) Minerals (55)
Solvent Purchased	Solvent Purchased Area Sources (101)

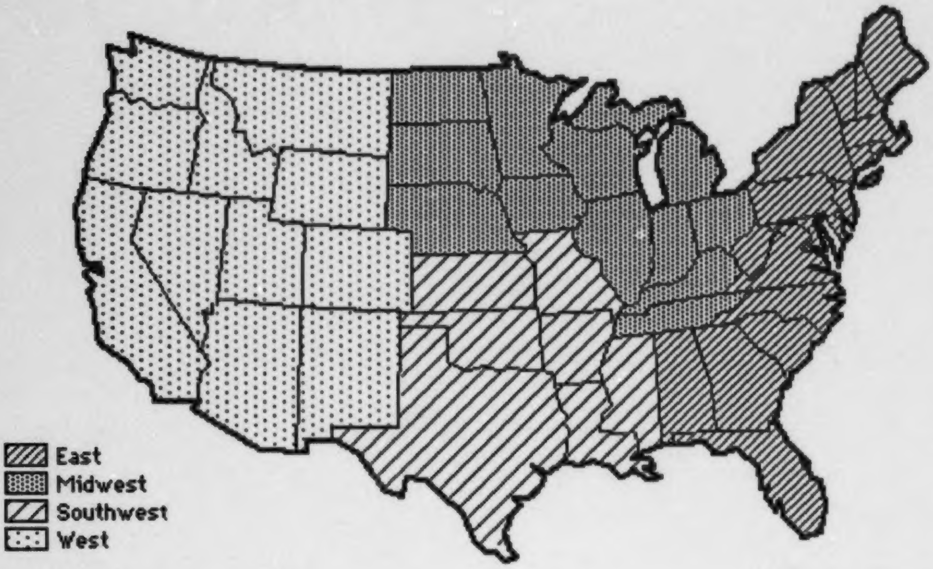
East
Midwest
Southwest
West

Figure 3-1. Regional Aggregation Scheme

Chapter 4

NAPAP TEST RUN RESULTS

This chapter presents of results of the NAPAP test runs using the data files described in the previous chapter.

DESCRIPTION OF RUNS

Six separate runs of VOCM were made for this report. The first run was a "base case" run that used reference growth rate data and included all constraints and emissions. The remaining five runs were "sensitivity runs" that varied a single parameter with respect to the base case run.

The following describes each run:

1.	Base Case Run	This run used reference growth rates, included an "implicit" constraint controlling new emissions to at least the level of control demonstrated in the base year emissions data base, included all constraints, and included all industrial categories.
2.	High Growth Run	This run was identical to the base case run except that it used growth rates developed under the high growth scenario.
3.	Low Growth Run	This run was identical to the base case run except that it used growth rates developed under the low growth scenario.
4.	No ELOC Run	This run was identical to the base case run except that the existing level of control (ELOC) in the base year was *not* applied to

		new emissions coming on line during the projection horizon.
5.	No Offset Constraints Run	This run was identical to the base case run except that all LAER/offset constraints and offset provisions were disabled.
6.	No Solvent Purchased Run	This run was identical to the base case run except that the solvent purchased area source category (101) was not included in the projection.

For all runs, projections were made for five-year increments from five years beyond the base year of 1980 to 30 years beyond the base year (1985, 1990, 1995, 2000, 2005, and 2010). Although VOCM can make emissions and costs estimates for up to 70 years beyond the base year, a 30 year horizon was chosen for consistency with previous VOCM test runs and other NAPAP models, and to limit the amount of generated output to a reasonable level. (The growth rate file provides growth rates until 2030).

The base case run is presented in considerably more detail than the sensitivity runs. Included in the base case results are aggregated industrial category and aggregated U.S. regional projections. Each of the five sensitivity runs is presented only as a comparison of total nationwide emissions to the base case run. Appendix A provides the actual output produced by VOCM for the base case run. Regional projection summaries as well as nationwide summary tables are provided. Appendix B provides nationwide summary tables only for the five sensitivity runs.

Each of the runs is discussed in the sections that follow. Because these runs are preliminary test runs only, the analysis of each is relatively limited.

BASE CASE RUN

Table 4-1 summarizes the emissions results for the base case run. The upper part of the table lists the results for each state while the lower part of the table provides totals for

Table 4-1. Summary of Emission Results: Base Case

State ID	State	1980 Tot Ctr (1000 tons)	1985 Tot Ctr (1000 tons)	1990 Tot Ctr (1000 tons)	1995 Tot Ctr (1000 tons)	2000 Tot Ctr (1000 tons)	2005 Tot Ctr (1000 tons)	2010 Tot Ctr (1000 tons)	Avg. Annual Growth (1980-2010) (percent)
1	Alabama	170	176	195	202	219	240	266	1.50
3	Arizona	41	51	65	74	85	96	109	3.31
4	Arkansas	91	106	140	163	184	207	234	3.20
5	California	848	875	980	1053	1142	1253	1407	1.70
6	Colorado	63	76	96	112	130	150	174	3.44
7	Connecticut	144	144	170	192	218	246	282	2.27
8	Delaware	39	36	35	34	33	34	37	-0.18
9	D.C.	6	7	8	9	10	11	13	2.61
10	Florida	133	172	224	263	302	346	398	3.72
11	Georgia	152	183	221	244	270	300	335	2.67
13	Idaho	18	21	27	31	35	39	44	3.02
14	Illinois	456	413	428	435	451	488	541	0.57
15	Indiana	290	333	385	438	485	540	603	2.47
16	Iowa	103	110	135	152	168	186	207	2.35
17	Kansas	162	159	183	195	206	221	239	1.30
18	Kentucky	179	159	154	145	141	151	167	-0.23
19	Louisiana	373	277	224	174	136	133	139	-3.24
20	Maine	42	42	48	51	55	61	68	1.62
21	Maryland	142	149	164	171	185	203	224	1.53
22	Massachussetts	267	281	334	377	411	456	513	2.20
23	Michigan	504	511	527	542	570	621	694	1.07
24	Minnesota	161	193	235	267	298	336	381	2.91
25	Mississippi	134	151	184	203	220	243	268	2.34
26	Missouri	307	347	404	438	479	527	586	2.18
27	Montana	19	18	21	22	23	25	26	1.05
28	Nebraska	67	74	86	94	104	115	130	2.23
29	Nevada	7	7	8	10	12	14	16	2.79
30	New Hampshire	47	52	61	69	80	91	107	2.78
31	New Jersey	355	359	383	399	424	466	528	1.33
32	New Mexico	61	59	47	49	53	59	66	0.26
33	New York	496	536	639	702	777	873	989	2.33
34	North Carolina	247	305	375	418	465	518	581	2.89
35	North Dakota	6	7	9	10	11	12	13	2.61
36	Ohio	518	526	583	623	669	736	822	1.55
37	Oklahoma	157	158	186	199	211	225	244	1.48
38	Oregon	85	94	115	132	147	166	188	2.68
39	Pennsylvania	546	513	542	549	578	622	689	0.78
41	Rhode Island	50	53	62	68	73	77	81	1.62
42	South Carolina	297	259	242	213	194	185	189	-1.50
43	South Dakota	10	12	14	16	18	19	22	2.66
44	Tennessee	245	238	241	230	232	242	261	0.21
45	Texas	1586	1583	1765	1849	1939	2071	2252	1.18
46	Utah	34	39	48	54	60	67	75	2.67
47	Vermont	12	14	18	22	25	30	35	3.63
48	Virginia	186	219	258	283	313	348	390	2.50
49	Washington	104	109	130	145	161	178	199	2.19
50	West Virginia	43	42	43	49	54	60	66	1.44
51	Wisconsin	192	194	211	220	236	260	292	1.41
52	Wyoming	32	24	25	25	24	23	21	-1.39
East Totals		3376	3542	4022	4313	4685	5166	5791	1.81
Midwest Totals		2730	2770	3008	3172	3383	3706	4133	1.39
Southwest Totals		2810	2782	3085	3221	3375	3626	3962	1.15
West Totals		1311	1373	1563	1708	1872	2069	2325	1.93
Petroleum Totals		1270	977	733	599	465	344	261	-5.13
Chem. Mfg. Totals		1091	988	928	860	851	925	1028	-0.20
Surface Ctg. Totals		1605	1447	1305	1146	994	886	868	-2.03
Fuel Comb. Totals		1041	961	1132	1166	1177	1190	1211	0.51
Solvent Purchased Totals		4597	5478	6979	8033	9199	10541	12080	3.27
Miscellaneous Totals		623	616	599	610	628	678	763	0.68
Nationwide Totals		10227	10467	11678	12415	13314	14566	16212	1.55

aggregated U.S. regions and industrial categories. The column to the right of the table presents an average annual growth rate in percent over the entire projection horizon (1980-2010).

Figure 4-1 presents a bar chart for VOC emissions for the U.S. displaying the growth in VOC emissions over the projection horizon. Figures 4-2 through 4-7 present bar charts for each aggregated industrial category. Figures 4-8 through 4-11 present bar charts for aggregated regions.

State growth in VOC emissions ranged from -3.24 percent (Louisiana) to 3.83 percent (Vermont). The highest regional growth is noted in the West (1.93 percent), while the lowest regional growth is noted in the Southwest (1.15 percent). The highest industrial growth is found in the solvent purchased category (3.27 percent), while the lowest industrial growth is found in the petroleum category (-5.13 percent). Overall, U.S. VOC emissions growth averaged 1.55 percent over the projection horizon.

The growth rates for various aggregated industrial categories vary greatly. The highest growth rate occurs in the solvent purchased area source category due to the lack of any regulatory constraints affecting this category (i.e., the projected emissions are a simple product of the base year emissions and the growth rate for this category). Likewise, the fuel combustion and miscellaneous categories are relatively unconstrained and experience positive emissions growth. In contrast, the petroleum, chemical manufacturing, and surface coating categories were relatively constrained and all showed negative overall growth rates. These categories generally show a sharp drop in emissions early in the projection horizon with a leveling or positive growth trend near the end of the projection horizon. Some categories show an initial negative growth in emissions as various constraints "kick in" followed by a modest rise as overall growth takes over and masks the effects of regulatory constraints. (The constraint data base includes few constraints with beginning/target years after 1990 due to the difficulty in predicting future regulatory programs.)

Regional variations in growth are less pronounced than industrial category variations. The differences noted are due primarily to variations in the growth rates used. The east and west regions show higher growth than the southwest and midwest regions. This trend is generally consistent with the growth rates that predict more economic growth for coastal areas.

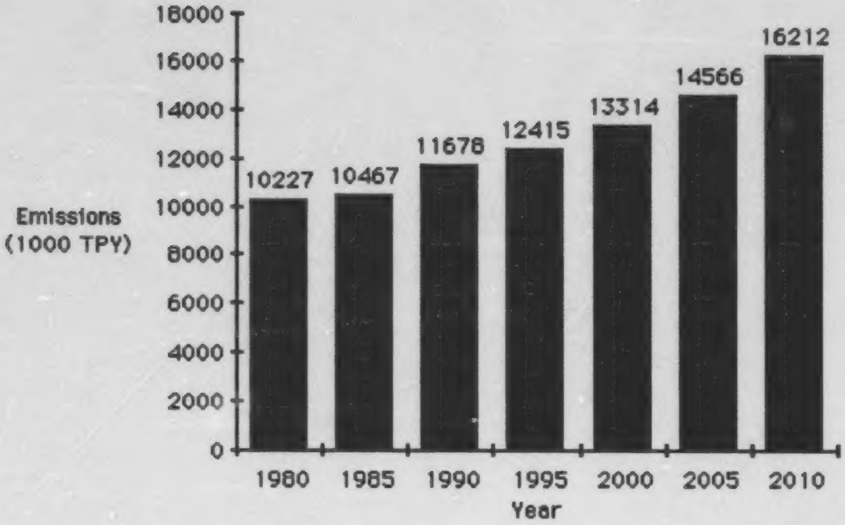

Figure 4-1. U.S. VOC Emissions: Base Case

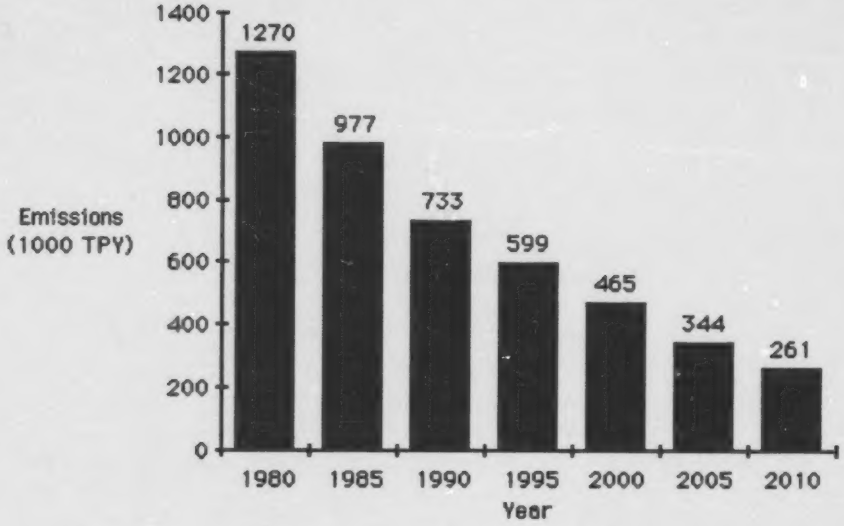

Figure 4-2. Petroleum VOC Emissions: Base Case

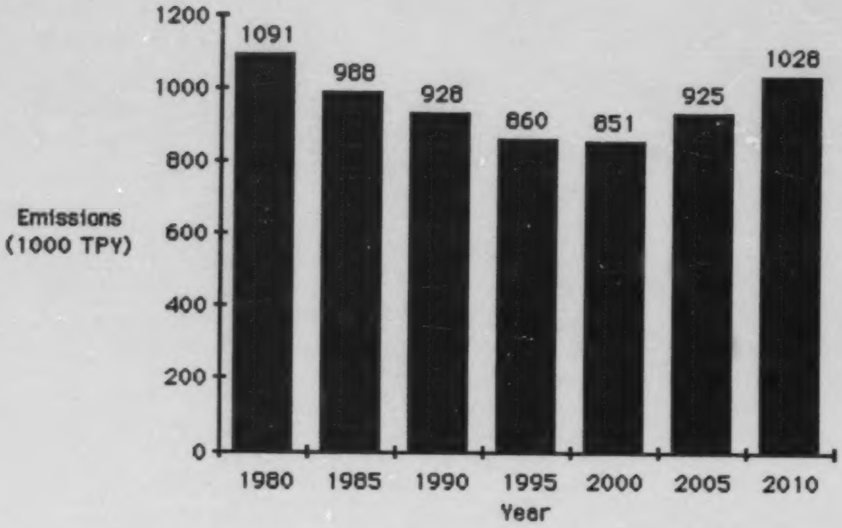

Figure 4-3. Chemical Manufacturing VOC Emissions: Base Case

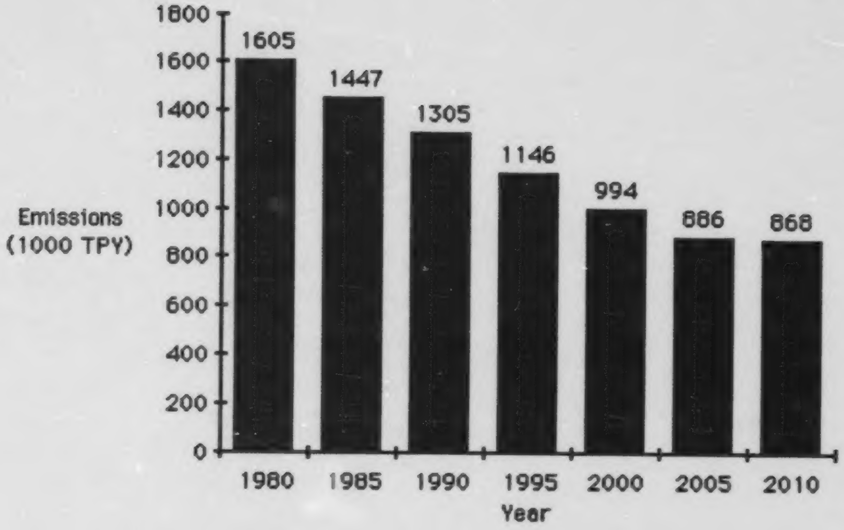

Figure 4-4. Surface Coating VOC Emissions: Base Case

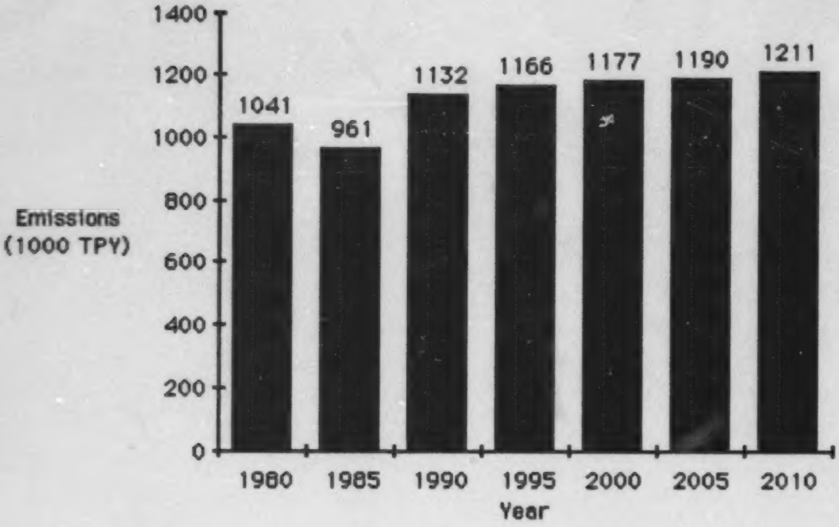

Figure 4-5. Fuel Combustion VOC Emissions: Base Case

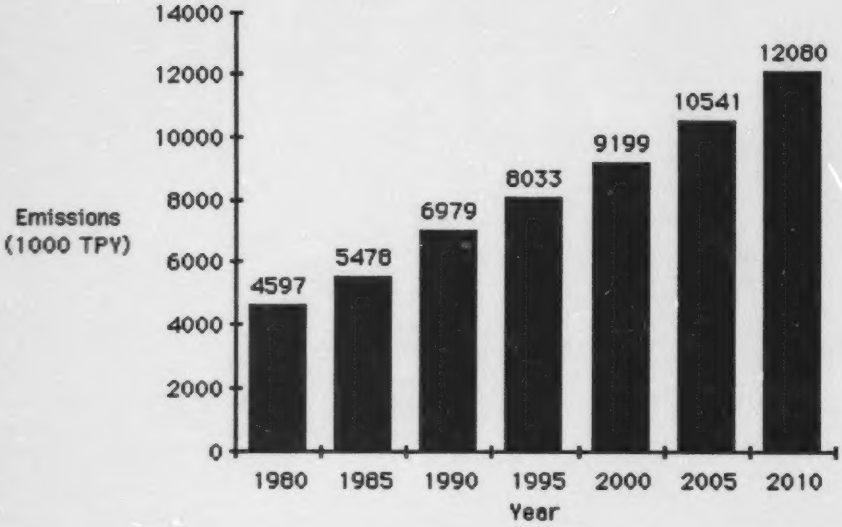

Figure 4-6. Solvent Purchased VOC Emissions: Base Case

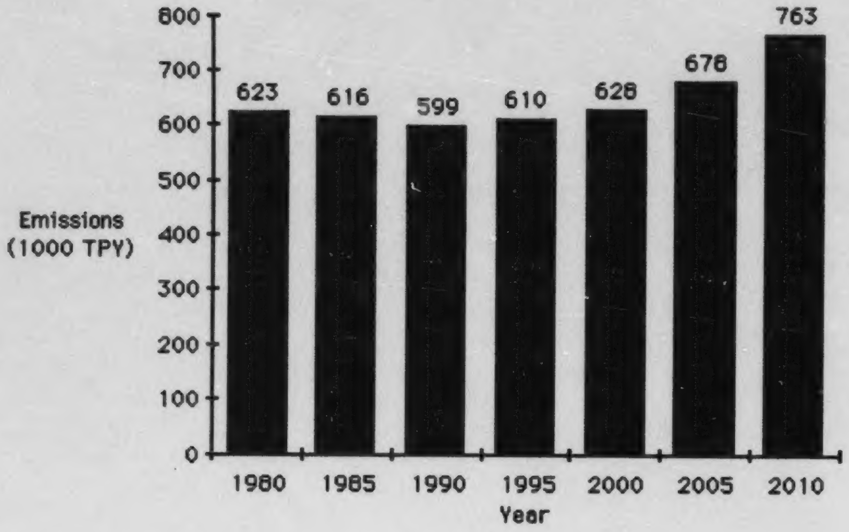

Figure 4-7. Miscellaneous VOC Emissions: Base Case

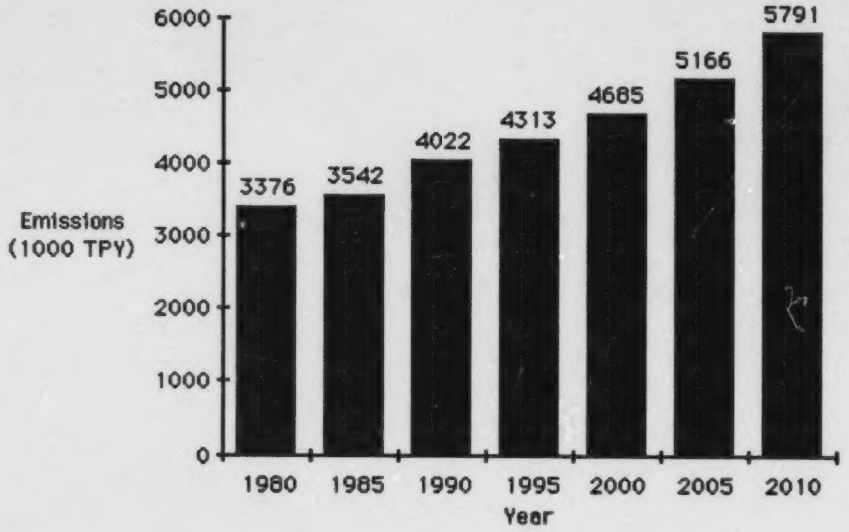

Figure 4-8. East VOC Emissions: Base Case

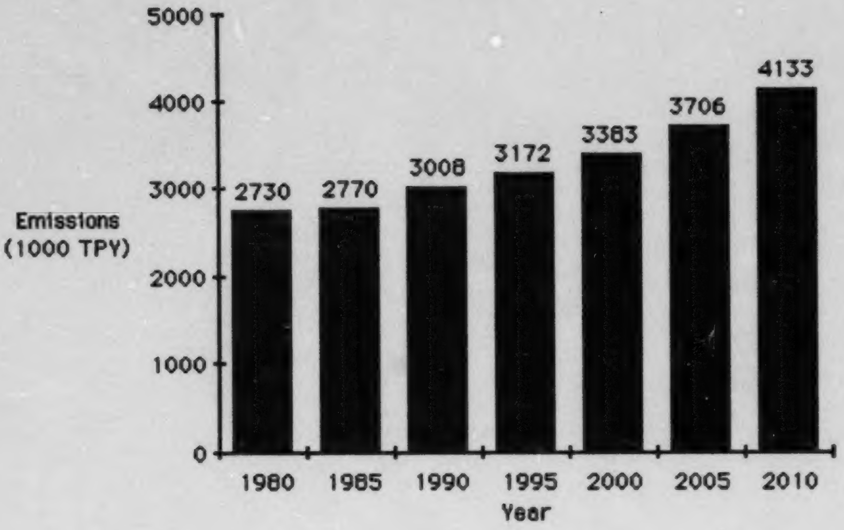

Figure 4-9. Midwest VOC Emissions: Base Case

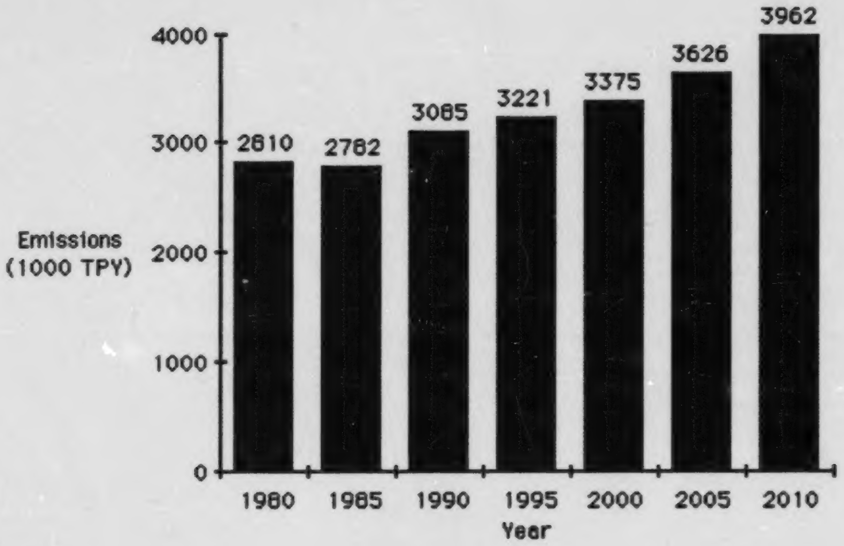

Figure 4-10. Southwest VOC Emissions: Base Case

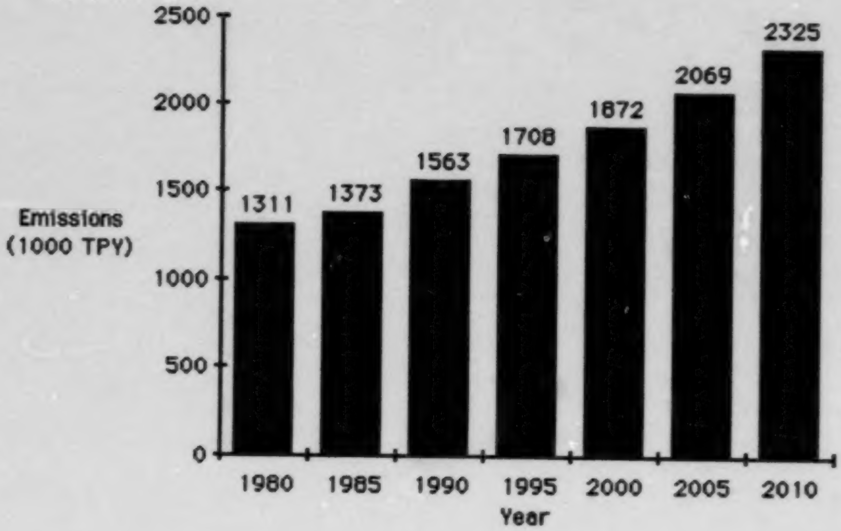

Figure 4-11. West VOC Emissions: Base Case

Table 4-2 summarizes the control cost results for the base case run. As was done for the emissions table, the upper part of the table lists the results for each state while the lower part of the table provides totals for aggregated U.S. regions and industrial categories. The column to the right of the table presents an overall annual growth rate in percent for the entire projection horizon (1980-2010).

Figure 4-12 presents a bar chart for VOC control costs for the entire U.S. displaying the growth in VOC control costs over the projection horizon. Figures 4-13 through 4-16 present bar charts for each aggregated industrial category (with the exception of the fuel combustion and solvent purchased categories which have no costs). Figures 4-17 through 4-20 present bar charts for each aggregated region.

The highest state growth in VOC control costs is in New York with a 21.29 percent annual growth. Several states show negative costs at the end of the projection period indicating a cost credit due to VOC controls. (Although a few states show a decrease in costs - or increasing cost credit - most have zero costs in the base year making it impossible to compute a rate of growth.) Aggregated regional growth in costs ranged from 3.78 percent (southwest) to 4.65 percent (west). For aggregated industrial categories, the highest growth is noted for the surface coating category (5.77 percent). For categories with non-zero costs, the lowest growth is noted for the miscellaneous category (3.16 percent). The overall annual growth rate for U.S. VOC control costs is 4.06 percent. The higher growth in costs compared to the growth in emissions reflects the increasing cost associated with more stringent emission controls required to reduce emissions growth to less than the underlying economic growth.

The relatively high costs in the surface coating category reflect the difficulty in controlling emissions from most surface coating processes. The cost curves ($/ton versus control efficiency) are generally very steep for this category. In some cases, increasing efficiency causes the cost of control to transition from a cost credit to a cost outlay as the costs of operating a control device exceed the credit from recovered solvent.

Both the fuel combustion and solvent purchased categories had no costs. Except for a general LAER constraint for fuel combustion sources in non-attainment areas, these categories had no constraints and no controls were identified as a basis for costs.

Table 4-2. Summary of Cost Results: Base Case

State ID	State	1980 Tot Cost ($1000)	1985 Tot Cost ($1000)	1990 Tot Cost ($1000)	1995 Tot Cost ($1000)	2000 Tot Cost ($1000)	2005 Tot Cost ($1000)	2010 Tot Cost ($1000)	Avg. Annual Growth (1980-2010) (percent)
1	Alabama	6184	9048	11439	12695	15281	19738	33092	5.75
3	Arizona	4079	12639	17573	21681	26089	30587	35634	7.49
4	Arkansas	19086	11863	16356	20586	23643	26864	30851	1.61
5	California	709881	1782951	2179482	2445663	2754611	3052005	3351505	5.31
6	Colorado	10821	25940	33586	39054	44410	50193	56590	5.67
7	Connecticut	7198	13116	19051	24052	29130	33921	38734	5.77
8	Delaware	33402	45816	74262	84271	94015	111441	122616	4.43
9	D.C.	77	145	258	408	516	634	741	7.84
10	Florida	1992	3424	7320	10294	13675	17896	22275	8.38
11	Georgia	13641	34958	44020	51453	61253	70814	81421	6.14
13	Idaho	0	-9	-31	-56	-79	-104	-130	-
14	Illinois	407314	537395	1055430	1188589	1303758	1435748	1568136	4.60
15	Indiana	86504	92571	121366	140699	156797	176923	196002	2.76
16	Iowa	-1011	-1314	-1478	-1636	-1478	-1454	-1475	1.27
17	Kansas	461403	479808	572568	634543	673638	722207	777588	1.75
18	Kentucky	55645	82147	164132	200784	239834	279406	320895	6.01
19	Louisiana	1286216	3057757	3761086	4326647	4885496	5538670	6260111	5.42
20	Maine	1274	3186	4899	6509	7981	9366	10930	7.43
21	Maryland	133123	143391	176163	205584	243015	280943	324153	3.01
22	Massachussetts	3106	18415	33063	45381	56001	65547	74333	11.16
23	Michigan	844228	1126122	2198779	2346922	2520948	2736858	2956770	4.27
24	Minnesota	2284	4163	5555	6953	8365	9825	11663	5.59
25	Mississippi	-7291	-10042	-11301	-11827	-11415	-11571	-11901	1.65
26	Missouri	147151	164206	188006	204085	217084	232657	252024	1.81
27	Montana	61799	64156	78717	87609	96978	107179	118201	2.19
28	Nebraska	1859	3675	5440	7175	9077	11473	13623	6.86
29	Nevada	1329	2250	2870	3585	4468	5328	6368	5.36
30	New Hampshire	125832	339550	429366	510410	573231	643855	722340	6.00
31	New Jersey	542332	553052	1241929	1317681	1454533	1593075	1729539	3.94
32	New Mexico	10559	10869	9934	9978	15099	16056	17127	1.63
33	New York	223	4176	10156	15148	21488	58409	73001	21.29
34	North Carolina	40654	48421	59774	76600	125737	142391	160837	4.69
35	North Dakota	0	-1	-3	-4	-12	11	684	-
36	Ohio	49959	68613	120403	143156	161422	183233	206491	4.84
37	Oklahoma	176938	223600	277796	368287	400834	448949	506956	3.57
38	Oregon	270694	301987	360747	419406	479351	542912	614817	2.77
39	Pennsylvania	309729	300239	662467	724531	831725	924111	1008933	4.02
41	Rhode Island	972	3619	5665	7254	8638	9992	11295	8.52
42	South Carolina	32022	83174	120699	157315	187696	219410	250175	7.09
43	South Dakota	0	-16	-88	-158	-220	-295	-373	-
44	Tennessee	70066	133257	167981	191721	219273	247761	277556	4.70
45	Texas	5155088	5824669	7838024	10169660	11416370	12726670	14205090	3.44
46	Utah	9214	8982	10903	11978	13185	14560	16286	1.92
47	Vermont	484	1056	1417	1816	2220	2615	3040	6.32
48	Virginia	13742	19399	48310	58541	68786	81064	94858	6.65
49	Washington	-1194	-1041	-969	-931	-609	-391	3187	-
50	West Virginia	7277	10239	14088	15890	17537	19644	22004	3.76
51	Wisconsin	26059	61444	76633	86593	99886	115518	131094	5.53
52	Wyoming	2484	1755	2091	2153	2173	2775	4576	2.06
East Totals		1273263	1634421	2964345	3325834	3812458	4304867	4784317	4.51
Midwest Totals		1542906	2108056	3914151	4310795	4717651	5195009	5681067	4.44
Southwest Totals		7238591	9751861	12642535	15711981	17605651	19684446	22020718	3.78
West Totals		1079666	2210479	2694902	3040121	3435678	3821099	4224160	4.65
Petroleum Totals		6192942	9874741	14258960	16852810	18556110	20494270	22555600	4.40
Chem. Mfg. Totals		4374478	4951831	6724213	8018842	9213013	10394440	11717320	3.34
Surface Ctg. Totals		352367	628308	900894	1128308	1360214	1621251	1891844	5.57
Fuel Comb. Totals		0	0	0	0	0	0	0	0
Solvent Purchased Totals		0	0	0	0	0	0	0	0
Miscellaneous Totals		214639	249939	331867	388761	442093	495476	545500	3.16
Nationwide Totals		11134430	15704820	22215930	26388720	29571430	33005430	36710270	4.06

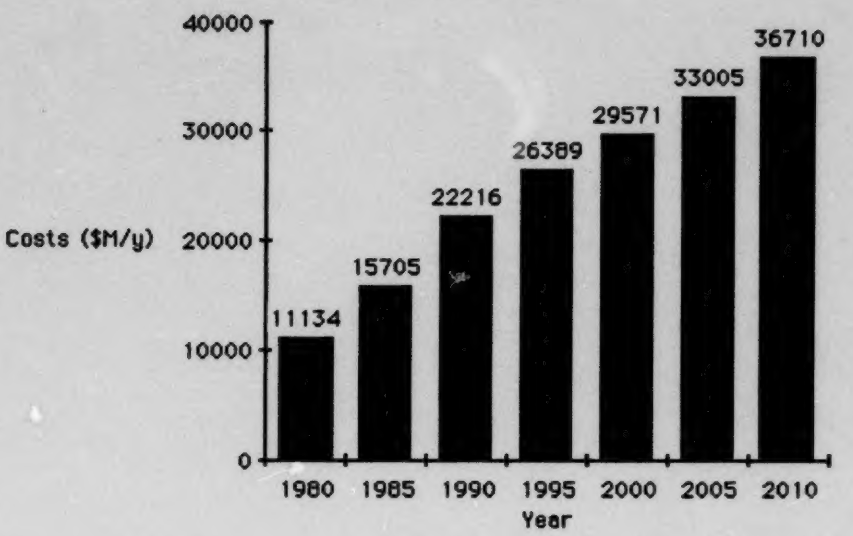

Figure 4-12. U.S. VOC Control Costs: Base Case

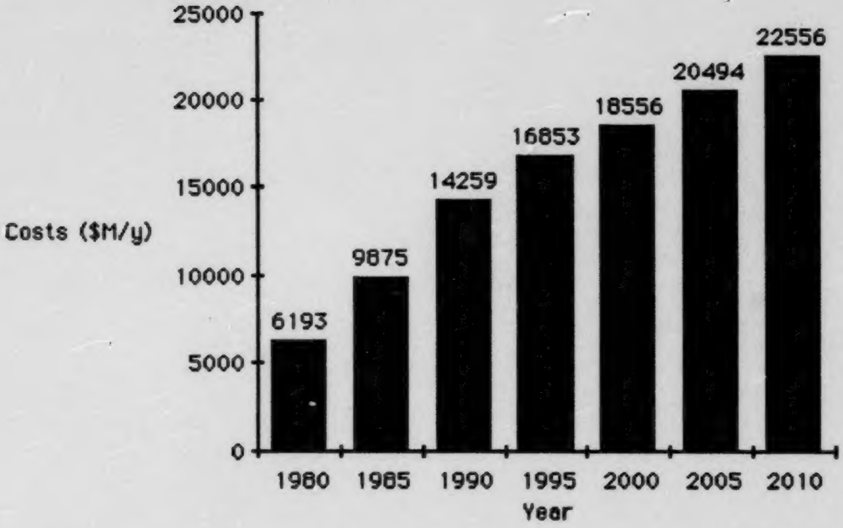

Figure 4-13. Petroleum VOC Control Costs: Base Case

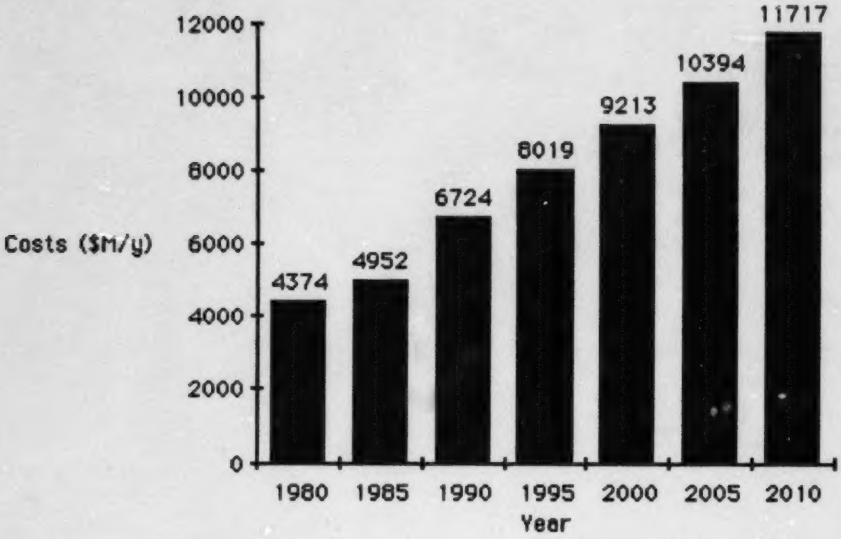

Figure 4-14. Chemical Manufacturing VOC Control Costs: Base Case

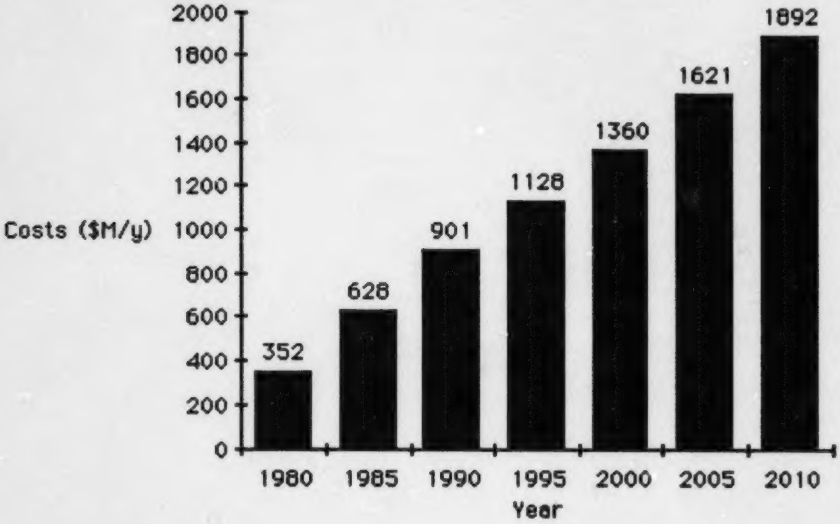

Figure 4-15. Surface Coating VOC Control Costs: Base Case

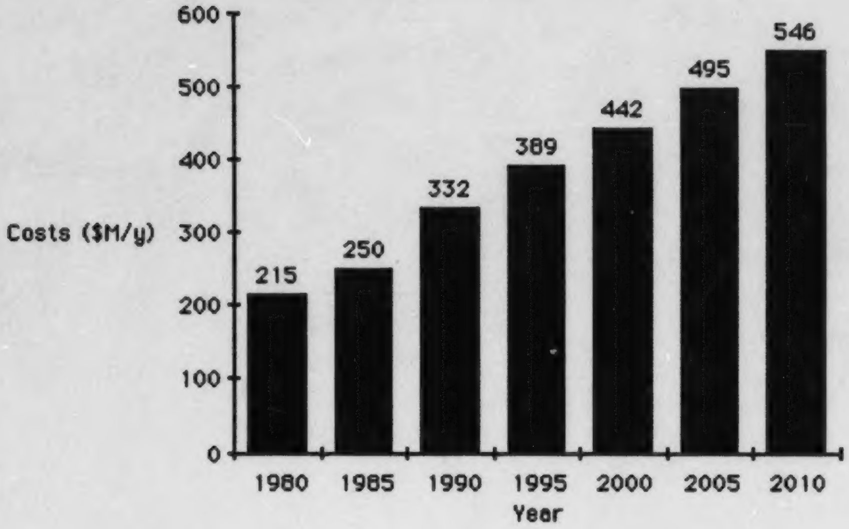

Figure 4-16. Miscellaneous VOC Control Costs: Base Case

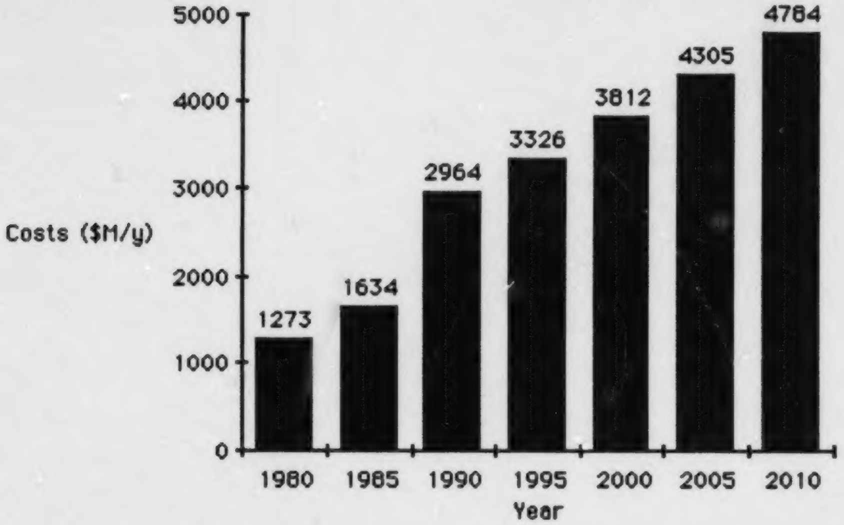

Figure 4-17. East VOC Control Costs: Base Case

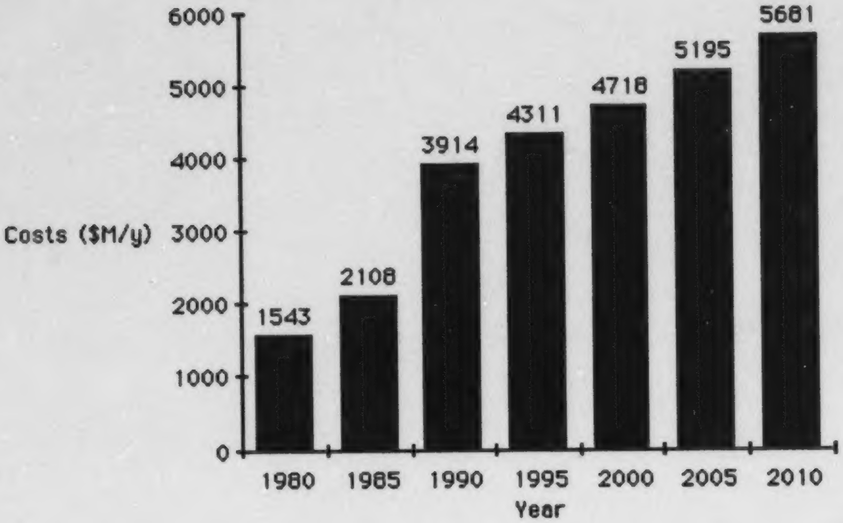

Figure 4-18. Midwest VOC Control Costs: Base Case

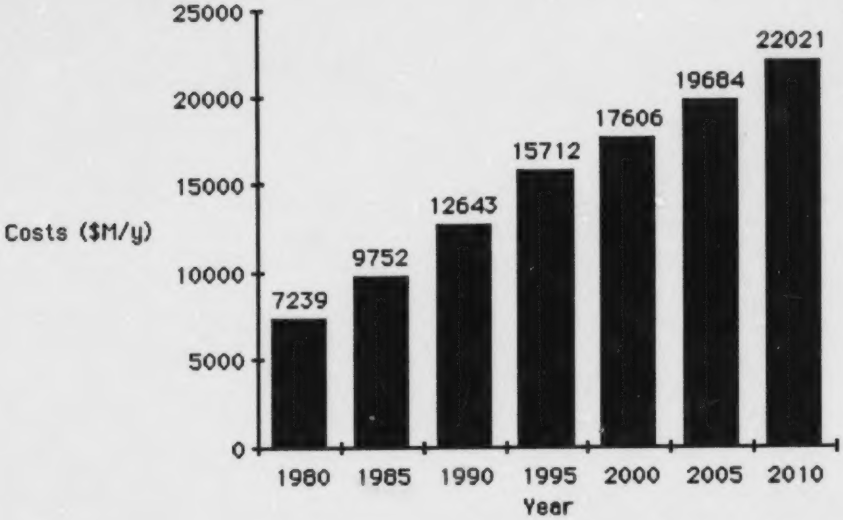

Figure 4-19. Southwest VOC Control Costs: Base Case

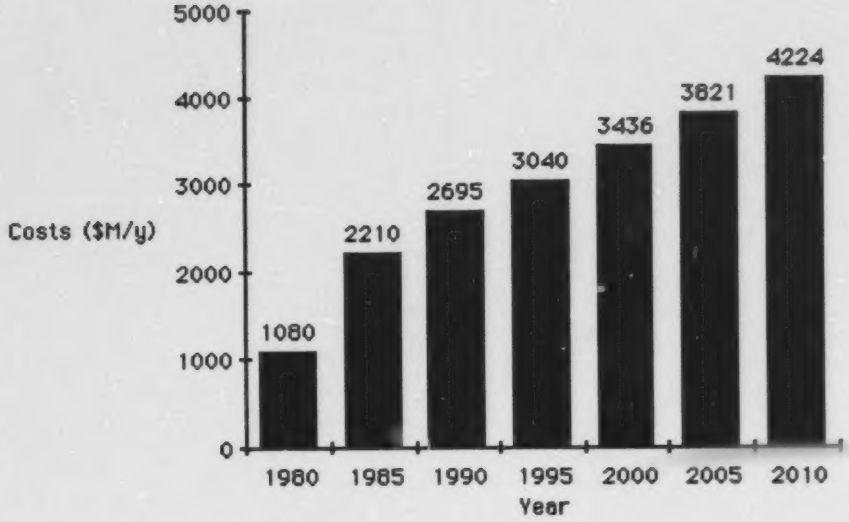

Figure 4-20. West VOC Control Costs: Base Case

HIGH GROWTH RUN

Figures 4-21 and 4-22 compare nationwide emissions and control costs between the base case run and the high growth run. Annual growth in emissions is increased from 1.55 percent (base case run using reference growth rates) to 1.98 percent (high growth run using high growth rates). Annual growth in costs is increased from 4.06 percent to 4.49 percent.

LOW GROWTH RUN

Figures 4-23 and 4-24 compare nationwide emissions and control costs between the base case run and the low growth run. Annual growth in emissions is decreased from 1.55 percent (base case run using reference growth rates) to 0.86 percent (low growth run using low growth rates). Annual growth in control costs is decreased from 4.06 percent to 3.32 percent.

NO EXISTING LEVEL OF CONTROL RUN

This sensitivity run turned off the option where all new emissions coming on line since the base year are controlled to at least the same level of control as demonstrated in the base year. Figures 4-25 and 4-26 compare nationwide emissions and control costs between the base case run and the no existing level of control run. Emissions growth is markedly higher with an annual growth of 4.26 percent compared to 1.55 percent for the base case run. Control cost growth is decreased with an annual growth of 3.05 percent compared to 4.06 percent in the base case run.

The increase in emissions and decrease in control costs reflects the lower level of controls when the existing level of control is not required of new sources. This result also indicates that many sources are controlling emissions for reasons not reflected in the constraint data base. In particular, the overall level of control in the chemical manufacturing category decreases from 93 percent in the base year (1980) to 60 percent in the final projection year (2010) when the existing level of control is not required. Instead of emissions decreasing at an annual rate of 0.2 percent as predicted in the base case run, emissions increase at an annual rate of 8.5 percent in the no existing level of control run.

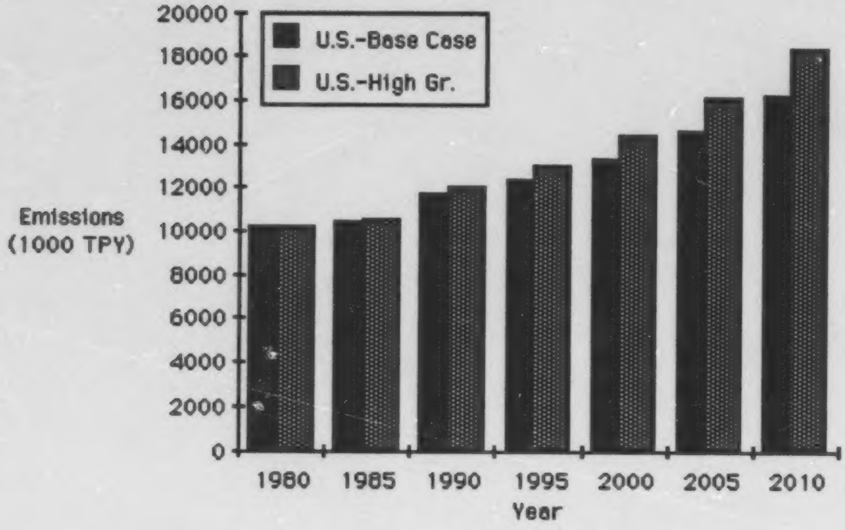

Figure 4-21. U.S. VOC Emissions: High Growth

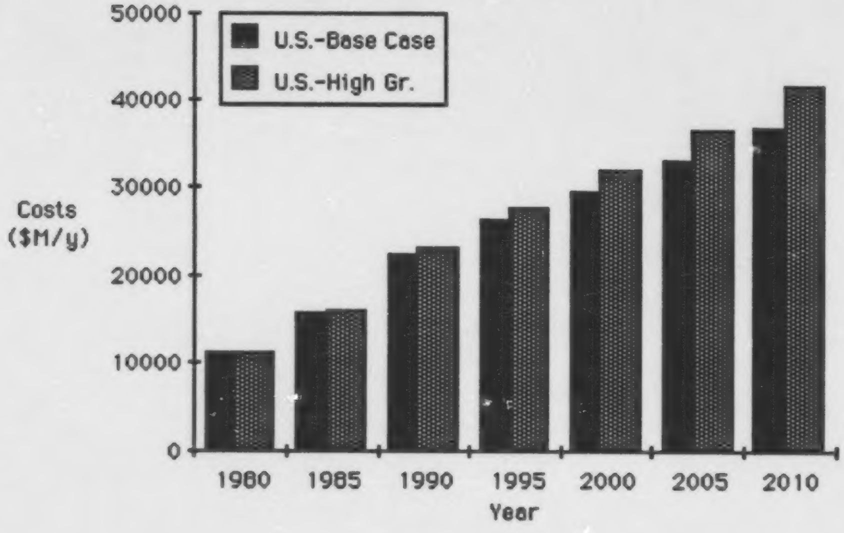

Figure 4-22. U.S. VOC Control Costs: High Growth

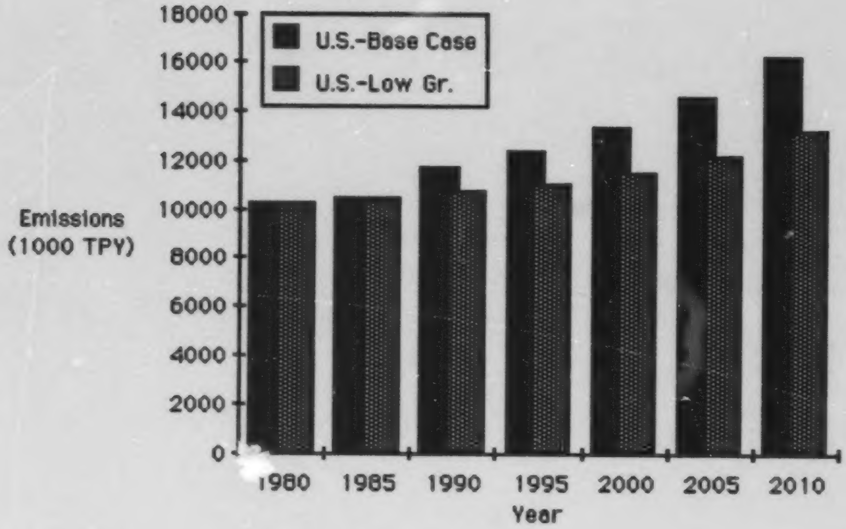

Figure 4-23. U.S. VOC Emissions: Low Growth

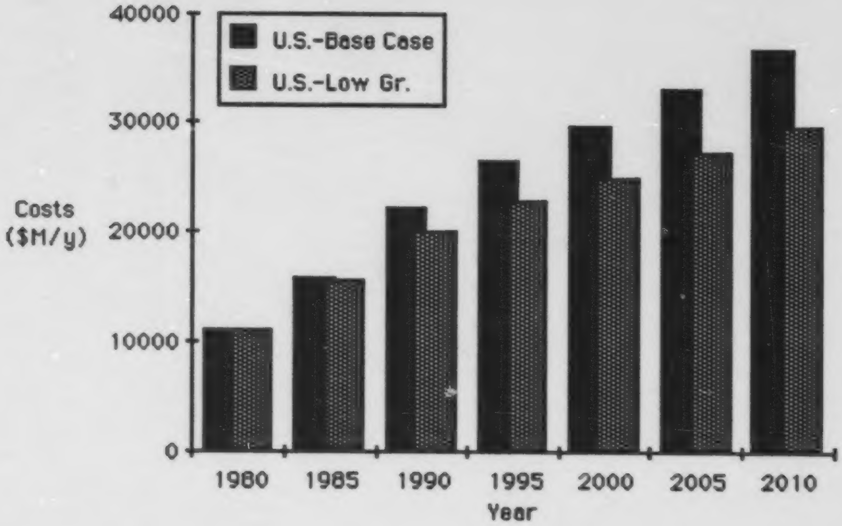

Figure 4-24. U.S. VOC Control Costs: Low Growth

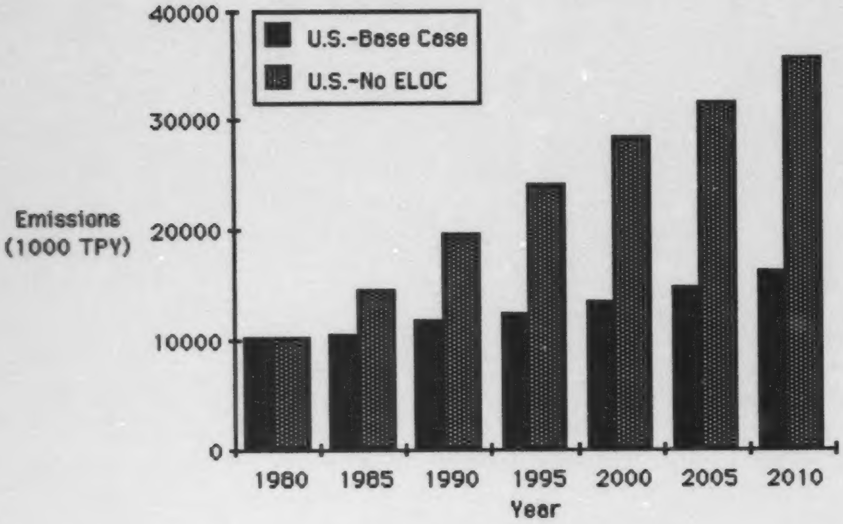

Figure 4-25. U.S. VOC Emissions: No Existing Level of Control

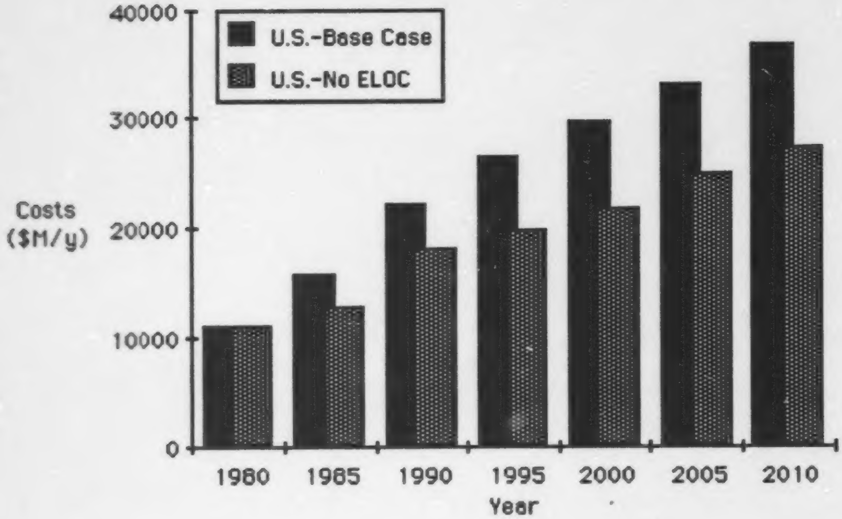

Figure 4-26. U.S. VOC Control Costs: No Existing Level of Control

This would indicate that the chemical manufacturing category controls emissions to relatively high levels for economic reasons rather than regulatory reasons.

NO LAER/OFFSET CONSTRAINT RUN

This sensitivity run disabled all LAER/offset constraints applying to new emissions in non-attainment areas. Figures 4-27 and 4-28 compare the emissions and control costs results for this run to the base case run. Emissions are higher for this sensitivity run with an annual growth of 2.45 percent compared to 1.55 percent for the base case run. Control cost growth is reduced sharply to 2.71 percent compared to 4.06 percent for the base case run.

The higher growth in emissions indicates that LAER/offset constraints play a large role in reducing emissions growth. The reduction in control costs reflects the lower level of control required when LAER/offset constraints are turned off.

NO SOLVENT PURCHASED CATEGORY RUN

This sensitivity run excluded the solvent purchased area source category from the projection. This category is large, representing 45 percent of all controlled emissions, and is generally uncontrolled due to its diverse nature. By excluding it, the results of the constraint analysis are more clearly reflected in the results.

Figures 4-29 and 4-30 compare this run with the base case run. Emissions growth is sharply reduced from 1.55 percent in the base case run to -1.03 percent for the run without the solvent purchased category. Control cost growth is unchanged since there are no control costs associated with the solvent purchased category.

The transition in emissions from positive growth to negative growth when the solvent purchased category is excluded indicates that overall emissions growth in the base case run can be attributed to the solvent purchased category. Emission increases in this category essentially compensate for the decreases in all other categories.

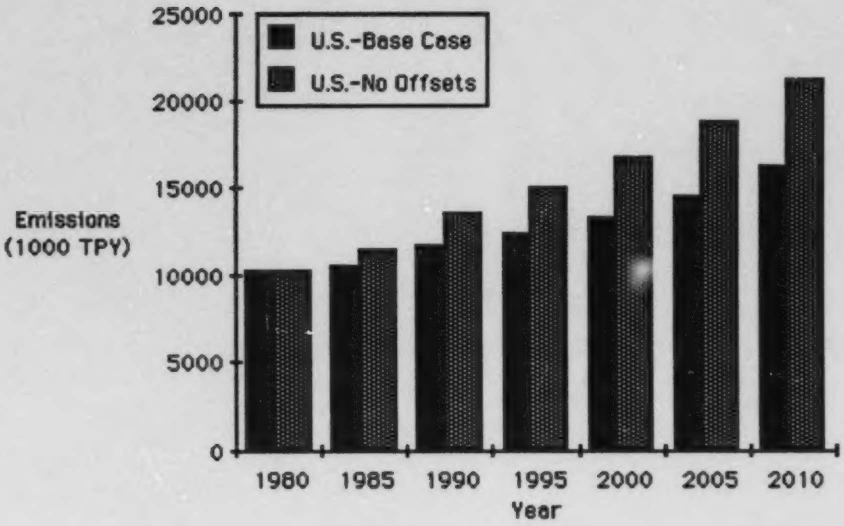

Figure 4-27. U.S. VOC Emissions: No LAER/Offset Constraints

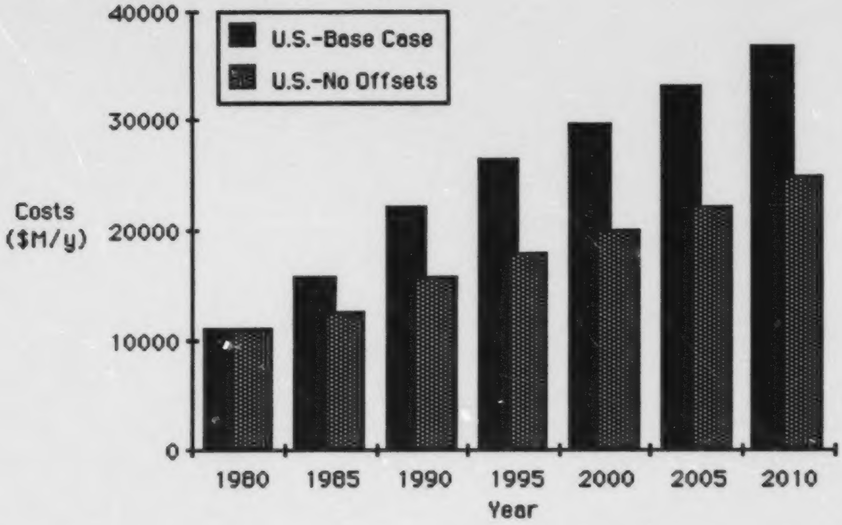

Figure 4-28. U.S. VOC Control Costs: No LAER/Offset Constraints

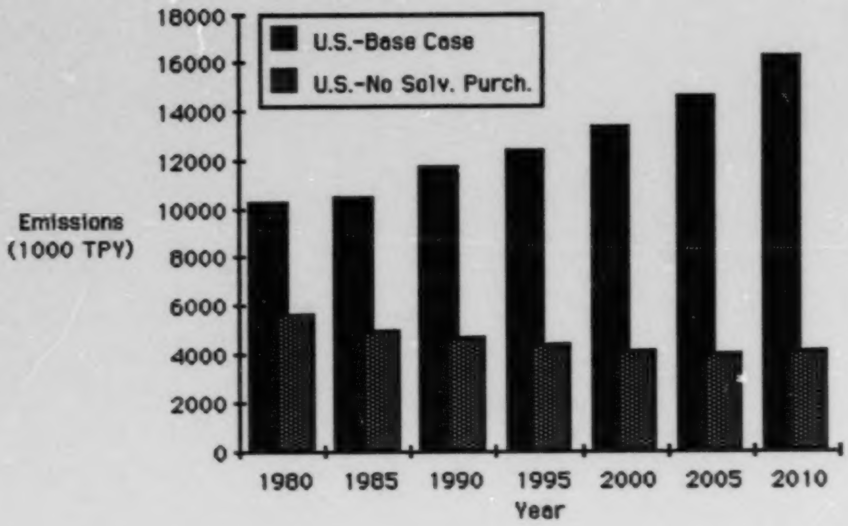

Figure 4-29. U.S. VOC Emissions: No Solvent Purchased Category

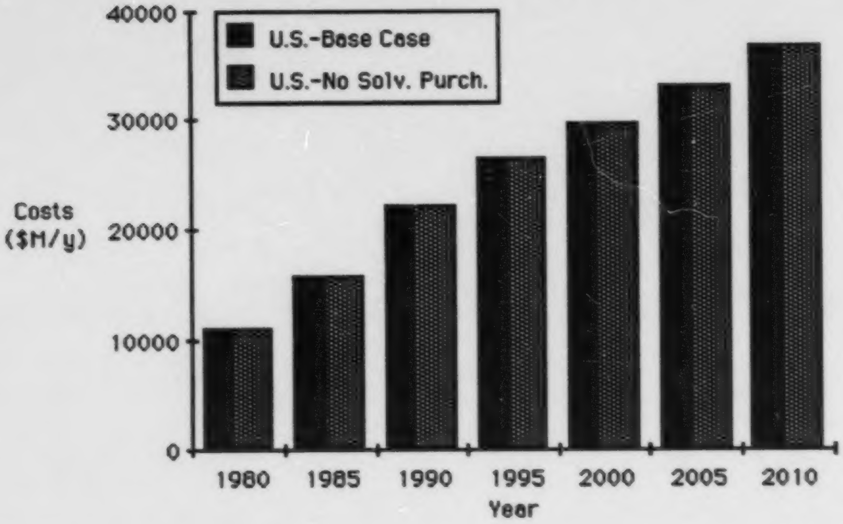

Figure 4-30. U.S. VOC Control Costs: No Solvent Purchased Category

Appendix A

BASE CASE RUN OUTPUTS

Base Case Run

```
Results of Emission Projection for Region  1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:47 AM, Tuesday August 25, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year - 1980                   |                 Proj Year - 1985                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    32766    25804    25804  21.2 |        0        0    32793    21473    21473  34.5 |  -16.8
CHEM MFG    |        0        0   432570    24913    24913  94.2 |        0        0   389997    18056    18056  95.4 |  -27.5
SURF COATG  |        0        0     2896     2050     2050  29.2 |        0        0     3640     1675     1675  54.0 |  -18.3
FUEL COMB   |        0        0    20614    20614    20614   0.0 |        0        0    19691    19691    19691   0.0 |   -4.5
SOLV PURCH  |        0        0    80407    80407    80407   0.0 |        0        0   100298   100298   100298   0.0 |   24.7
MISC        |        0        0    23980    16441    16441  31.4 |        0        0    24573    14863    14863  39.5 |   -9.6
------------------------------------------------------------------------------------------------------------------------
            |        0        0   593233   170229   170229  71.3 |        0        0   570992   176056   176056  69.2 |    3.4
```

```
Results of Cost Analysis for Region 1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:47 AM, Tuesday August 25, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year - 1980            |           Proj Year - 1985            |
ID          |        Cost    Emis Red   Cost Eff |         Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM   |   10315390.       6962.      1482. |    11570320.      11320.       1022. |    1254930.        12.2
CHEM MFG    |   -6094305.     407657.         0. |    -5224608.     371941.          0. |     869697.         0.0
SURF COATG  |     192042.        846.       227. |      457593.       1965.        233. |     265551.       138.3
FUEL COMB   |          0.          0.         0. |           0.          0.          0. |          0.         0.0
SOLV PURCH  |          0.          0.         0. |           0.          0.          0. |          0.         0.0
MISC        |    1770546.       7539.       235. |     2244581.       9710.        231. |     474035.        26.8
---------------------------------------------------------------------------------------------------------
            |    6183668.     423004.        15. |     9047882.     394936.         23. |    2864214.        46.3
```

```
Results of Emission Projection for Region  3
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:48 AM, Tuesday August 25, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year - 1980                   |                 Proj Year - 1985                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      925      640     3386      961     1601  62.9 |     1114      638     4311      553     1190  78.1 |  -25.6
CHEM MFG    |     2931      494      791      790     1284  65.5 |     3217      541     1058      605     1146  73.2 |  -10.7
SURF COATG  |      645      645     2877     2877     3522   0.0 |      890      890     3974     1382     2272  53.3 |  -35.5
FUEL COMB   |     3556     3556     5963     5963     9519   0.0 |     4020     4020     6584     6584    10604   0.0 |   11.4
SOLV PURCH  |     8473     8473    16447    16447    24920   0.0 |    12096    12096    23480    23480    35577   0.0 |   42.8
MISC        |      140      140       84       84      224   0.0 |      164      164      102       77      241   9.5 |    7.5
------------------------------------------------------------------------------------------------------------------------
            |    16670    13948    29548    27122    41070  11.1 |    21502    18349    39510    32681    51030  16.4 |   24.3
```

```
Results of Cost Analysis for Region 3
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:48 AM, Tuesday August 25, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year - 1980            |           Proj Year - 1985            |
ID          |        Cost    Emis Red   Cost Eff |         Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM   |    4115109.       2710.      1518. |    10279210.       4235.       2427. |    6164100.       149.8
CHEM MFG    |     -36333.       2438.         0. |       53465.       3129.         17. |      89798.         0.0
SURF COATG  |          0.          0.         0. |     2301057.       2592.        888. |    2301057.         0.0
FUEL COMB   |          0.          0.         0. |           0.          0.          0. |          0.         0.0
SOLV PURCH  |          0.          0.         0. |           0.          0.          0. |          0.         0.0
MISC        |          0.          0.         0. |        5600.         25.        222. |       5600.         0.0
---------------------------------------------------------------------------------------------------------
            |    4078776.       5148.       792. |    12639330.       9982.       1266. |    8560555.       209.9
```

```
Results of Emission Projection for Region  4
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:48 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                   |                   Proj Year = 1985                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     8594     1488      300       37     1525   82.9 |     4892      760      284       85      844   83.7 |  -44.6
CHEM MFG    |    15716     7805    10350      153     7958   69.5 |    17117     7471    15464      103     7574   76.8 |   -4.8
SURF COATG  |     1383     1383      130      130     1513    0.0 |     1889     1889      178      107     1996    3.4 |   31.9
FUEL COMB   |    11914    11914      229      229    12143    0.0 |    11108    11108      212      212    11319    0.0 |   -6.8
SOLV PURCH  |    64229    64229     1311     1311    65540    0.0 |    80348    80348     1640     1640    81988    0.0 |   25.1
MISC        |     8071     1880        0        0     1880   76.7 |    10286     1911        0        0     1911   81.4 |    1.6
-----------------------------------------------------------------------------------------------------------------------------
            |   109907    88699    12320     1860    90559   25.9 |   125639   103486    17777     2146   105631   26.3 |   16.6
```

```
Results of Cost Analysis for Region 4
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:48 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980         |          Proj Year = 1985         |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |        Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   |   16630290.      7369.      2257. |    9518451.      4332.      2197. |     -7111843.      -42.8
CHEM MFG    |    1081718.     18108.        60. |     469494.     25007.        19. |      -612224.      -56.6
SURF COATG  |          0.         0.         0. |      16016.        71.       227. |        16016.        0.0
FUEL COMB   |          0.         0.         0. |          0.         0.         0. |            0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |            0.        0.0
MISC        |    1374402.      6191.       222. |    1859301.      8375.       222. |       484899.       35.3
-----------------------------------------------------------------------------------------------------------------
            |   19086410.     31668.       603. |   11863260.     37785.       314. |     -7223152.      -37.8
```

```
Results of Emission Projection for Region  5
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:48 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                   |                   Proj Year = 1985                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   935714   196609   196609   79.0 |        0        0  1064376   135268   135268   87.3 |  -31.2
CHEM MFG    |        0        0    34451    23334    23334   32.3 |        0        0    43152    17325    17325   59.9 |  -25.8
SURF COATG  |        0        0   191901   127669   127669   33.5 |        0        0   239761    99133    99133   58.7 |  -22.4
FUEL COMB   |        0        0    48125    46406    46406    3.6 |        0        0    51466    49436    49436    3.9 |    6.5
SOLV PURCH  |        0        0   426532   426532   426532    0.0 |        0        0   548014   548014   548014    0.0 |   28.5
MISC        |        0        0   189824    27657    27657   85.4 |        0        0   213261    25411    25411   88.1 |   -8.1
-----------------------------------------------------------------------------------------------------------------------------
            |        0        0  1826547   848207   848207   53.6 |        0        0  2160029   874588   874588   59.5 |    3.1
```

```
Results of Cost Analysis for Region 5
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:48 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980         |          Proj Year = 1985         |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |        Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   |  639971300.    739105.       866. | 1669860000.    929108.      1797. |   1029889000.      160.9
CHEM MFG    |    1505059.     11117.       135. |    3306169.     25827.       128. |      1801110.      119.7
SURF COATG  |   32424240.     64232.       505. |   67772490.    140628.       482. |     35348250.      109.0
FUEL COMB   |          0.      1719.         0. |          0.      2030.         0. |            0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |            0.        0.0
MISC        |   35980550.    162167.       222. |   42012740.    187850.       224. |      6032196.       16.8
-----------------------------------------------------------------------------------------------------------------
            |  709881200.    978340.       726. | 1782951000.   1285442.      1387. |   1073070000.      151.2
```

```
Results of Emission Projection for Region  6
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:49 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                   |                 Proj Year = 1985                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     2122     1778    12469     1962     3740  74.4 |     2476      843    14041     2204     3047  81.6 |  -18.5
CHEM MFG   |     5657     3414     3221     1521     4935  44.4 |     8595     5703     3732      903     6606  46.4 |   33.9
SURF COATG |      483      483     6997     6430     6913   7.6 |      475      439     6878     5285     5724  22.1 |  -17.2
FUEL COMB  |     4200     3583     3829     3658     7241   9.8 |     4440     3855     3924     3498     7353  12.1 |    1.5
SOLV PURCH |    16741    16741    19652    19652    36393   0.0 |    22446    22446    26348    26348    48794   0.0 |   34.1
MISC       |     3870     2963      999      999     3962  18.6 |     4765     3964     1274      767     4731  21.7 |   19.4
------------------------------------------------------------------------------------------------------------------------------
           |    33073    28962    47167    34222    63184  21.3 |    43196    37249    56198    39006    76256  23.3 |   20.7
```

```
Results of Cost Analysis for Region 6
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:49 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |           Proj Year = 1985          |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |    9759443.      10851.        899. |   23988910.      13470.       1781. |   14229470.       145.8
CHEM MFG   |     493911.       3943.        125. |     848876.       5721.        148. |     354965.        71.9
SURF COATG |     128709.        567.        227. |     469046.       1629.        288. |     340337.       264.4
FUEL COMB  |          0.        788.          0. |          0.       1011.          0. |          0.         0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |          0.         0.0
MISC       |     438954.        907.        484. |     632948.       1308.        484. |     193994.        44.2
---------------------------------------------------------------------------------------------------------------
           |   10821020.      17056.        634. |   25939780.      23138.       1121. |   15118770.       139.7
```

```
Results of Emission Projection for Region  7
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:49 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                   |                 Proj Year = 1985                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0     3047      995      995  67.3 |        0        0     3467      831      831  76.0 |  -16.5
CHEM MFG   |        0        0    11761     3327     3327  71.7 |        0        0    16078     2212     2212  86.2 |  -33.5
SURF COATG |        0        0    53122    36053    36053  32.1 |        0        0    62292    20529    20529  67.0 |  -43.1
FUEL COMB  |        0        0      565      565      565   0.0 |        0        0      645      645      645   0.0 |   14.1
SOLV PURCH |        0        0   100324   100324   100324   0.0 |        0        0   117664   117664   117664   0.0 |   17.3
MISC       |        0        0     4256     3046     3046  28.4 |        0        0     4190     2426     2426  42.1 |  -20.4
------------------------------------------------------------------------------------------------------------------------------
           |        0        0   173075   144310   144310  16.6 |        0        0   204335   144307   144307  29.4 |   -0.0
```

```
Results of Cost Analysis for Region 7
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:49 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |           Proj Year = 1985          |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |     983585.       2052.        479. |    1762551.       2636.        669. |     778966.        79.2
CHEM MFG   |    1388580.       8434.        165. |    2542073.      13866.        183. |    1153493.        83.1
SURF COATG |    4706528.      17069.        276. |    8609335.      41762.        206. |    3902807.        82.9
FUEL COMB  |          0.          0.          0. |          0.          0.          0. |          0.         0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |          0.         0.0
MISC       |     119596.       1210.         99. |     201883.       1764.        114. |      82287.        68.8
---------------------------------------------------------------------------------------------------------------
           |    7198289.      28765.        250. |   13115840.      60028.        218. |    5917553.        82.2
```

```
Results of Emission Projection for Region  8
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:49 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                  |                Proj Year = 1985                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      192       40    14942     7000     7040  53.5 |      211       38    15706     5583     5621  64.7 |  -20.2
CHEM MFG    |     8825      809   312904     4190     4999  98.4 |     8485      787   332618     2992     3779  98.9 |  -24.4
SURF COATG  |        0        0    47712    12965    12965  72.8 |        0        0    67009    10261    10261  84.7 |  -20.9
FUEL COMB   |       57       57      176      176      233   0.0 |       63       63      199      199      262   0.0 |   12.4
SOLV PURCH  |      517      517    12402    12402    12919   0.0 |      636      636    15249    15249    15885   0.0 |   23.0
MISC        |      112      112    75436      342      454  99.4 |      118      118    79694      265      382  99.5 |  -15.8
--------------------------------------------------------------------------------------------------------------------------
            |     9703     1535   463572    37075    38610  91.8 |     9513     1642   510476    34549    36191  93.0 |   -6.3


Results of Cost Analysis for Region 8
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:49 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980          |          Proj Year = 1985         |
ID          |       Cost   Emis Red   Cost Eff |       Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------
PETROLEUM   |  18867110.      8094.      2331. |  24833790.     10296.      2412. |     5966680.       31.6
CHEM MFG    |  -4129055.    316730.         0. |  -3422742.    337324.         0. |      706314.        0.0
SURF COATG  |   7887569.     34747.       227. |  12879800.     56748.       227. |     4992227.       63.3
FUEL COMB   |         0.         0.         0. |         0.         0.         0. |           0.        0.0
SOLV PURCH  |         0.         0.         0. |         0.         0.         0. |           0.        0.0
MISC        |  10776760.     75094.       144. |  11524740.     79429.       145. |      747976.        6.9
--------------------------------------------------------------------------------------------------
            |  33402390.    434665.        77. |  45815590.    483798.        95. |    12413200.       37.2


Results of Emission Projection for Region  9
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:50 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                  |                Proj Year = 1985                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0      210       21       21  90.0 |        0        0      199       17       17  91.3 |  -17.3
SURF COATG  |        0        0      171      150      150  12.3 |        0        0      186      116      116  37.5 |  -22.4
FUEL COMB   |        0        0       37       37       37   0.0 |        0        0       40       40       40   0.0 |    7.7
SOLV PURCH  |        0        0     5182     5182     5182   0.0 |        0        0     6004     6004     6004   0.0 |   15.9
MISC        |        0        0      758      758      758   0.0 |        0        0      843      628      628  25.6 |  -17.2
--------------------------------------------------------------------------------------------------------------------------
            |        0        0     6358     6148     6148   3.3 |        0        0     7274     6806     6806   6.4 |   10.7


Results of Cost Analysis for Region 9
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:50 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980          |          Proj Year = 1985         |
ID          |       Cost   Emis Red   Cost Eff |       Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------
PETROLEUM   |     69552.       189.       368. |     66994.       182.       368. |       -2558.       -3.7
SURF COATG  |      7398.        21.       352. |     30389.        70.       434. |       22991.      310.8
FUEL COMB   |         0.         0.         0. |         0.         0.         0. |           0.        0.0
SOLV PURCH  |         0.         0.         0. |         0.         0.         0. |           0.        0.0
MISC        |         0.         0.         0. |     47934.       216.       222. |       47934.        0.0
--------------------------------------------------------------------------------------------------
            |     76950.       210.       366. |    145316.       468.       311. |       68366.       88.8
```

```
Results of Emission Projection for Region  10
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:50 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                  Proj Year = 1985                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1274     1103     5211     4679     5782   10.8 |     1401     1179     5790     1333     2512   65.1 |  -56.6
CHEM MFG    |        0        0     3032     3030     3030    0.1 |        0        0     3733     2243     2243   39.9 |  -26.0
SURF COATG  |      908      908     8633     7931     8839    7.4 |     1129     1056    10846     6586     7642   36.2 |  -13.5
FUEL COMB   |     2661     2661     1036     1036     3697    0.0 |     3030     3030     1137     1137     4167    0.0 |   12.7
SOLV PURCH  |    24556    24556    87063    87063   111619    0.0 |    34216    34216   121314   121314   155530    0.0 |   39.3
MISC        |        0        0     1204      135      135   88.8 |        0        0     1485      153      153   89.7 |   13.6
-----------------------------------------------------------------------------------------------------------------------------
            |    29399    29228   106179   103874   133102    1.8 |    39776    39482   144305   132767   172248    6.4 |   29.4
```

```
Results of Cost Analysis for Region 10
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:50 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |          Proj Year = 1985            |
ID          |         Cost     Emis Red    Cost Eff |         Cost     Emis Red    Cost Eff |     Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1638693.        703.       2331. |     1862478.       4679.        398. |     223785.        13.7
CHEM MFG    |         -30.          2.          0. |      330222.       1490.        222. |     330252.         0.0
SURF COATG  |      159354.        702.        227. |      983623.       4333.        227. |     824269.       517.3
FUEL COMB   |           0.          0.          0. |           0.          0.          0. |          0.         0.0
SOLV PURCH  |           0.          0.          0. |           0.          0.          0. |          0.         0.0
MISC        |      194214.       1069.        182. |      247202.       1331.        186. |      52988.        27.3
--------------------------------------------------------------------------------------------------------------
            |     1992231.       2476.        805. |     3423526.      11834.        289. |    1431295.        71.8
```

```
Results of Emission Projection for Region  11
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:50 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                  Proj Year = 1985                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    20368     3222     3222   84.2 |        0        0    23006     1960     1960   91.5 |  -39.2
CHEM MFG    |        0        0     5541     1505     1505   72.8 |        0        0     6900     1088     1088   84.2 |  -27.7
SURF COATG  |        0        0    15742    15588    15588    1.0 |        0        0    23912    12777    12777   46.6 |  -18.0
FUEL COMB   |        0        0     9449     9449     9449    0.0 |        0        0    10720    10720    10720    0.0 |   13.4
SOLV PURCH  |        0        0   121011   121011   121011    0.0 |        0        0   154665   154665   154665    0.0     27.8
MISC        |        0        0    15388     1507     1507   90.2 |        0        0    16824     1320     1320   92.2     12.4
-----------------------------------------------------------------------------------------------------------------------------
            |        0        0   187499   152282   152282   18.8 |        0        0   236026   182530   182530   22.7 |   19.9
```

```
Results of Cost Analysis for Region 11
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:50 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |          Proj Year = 1985            |
ID          |         Cost     Emis Red    Cost Eff |         Cost     Emis Red    Cost Eff |     Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |    10091110.      17146.        589. |    27911650.      21046.       1326. |   17820540.       176.6
CHEM MFG    |      490829.       4036.        122. |     1144838.       5811.        197. |     654009.       133.2
SURF COATG  |       34958.        154.        227. |     2527584.      11135.        227. |    2492626.      7130.3
FUEL COMB   |           0.          0.          0. |           0.          0.          0. |          0.         0.0
SOLV PURCH  |           0.          0.          0. |           0.          0.          0. |          0.         0.0
MISC        |     3023910.      13881.        218. |     3373968.      15505.        218. |     350058.        11.6
--------------------------------------------------------------------------------------------------------------
            |    13640810.      35217.        387. |    34958040.      53497.        653. |   21317230.       156.3
```

```
Results of Emission Projection for Region  13
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:50 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                 Proj Year = 1985                   |
ID          |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |       599       599         0         0       599   0.0 |       625       554         0         0       554  11.3 |   -7.5
CHEM MFG    |       236       236         0         0       236   0.0 |       347       347         0         0       347   0.0 |   47.0
FUEL COMB   |      1551      1551         0         0      1551   0.0 |      1553      1553         0         0      1553   0.0 |    0.1
SOLV PURCH  |     12392     12392         0         0     12392   0.0 |     15643     15643         0         0     15643   0.0 |   26.2
MISC        |      3000      3000         0         0      3000   0.0 |      3205      3205         0         0      3205   0.0 |    6.8
----------------------------------------------------------------------------------------------------------------------------
            |     17778     17778         0         0     17778   0.0 |     21374     21303         0         0     21303   0.3 |   19.8
```

```
Results of Cost Analysis for Region 13
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:50 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980             |          Proj Year = 1985              |
ID          |          Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |            0.          0.          0. |        -9089.         71.          0. |        -9089.         0.0
CHEM MFG    |            0.          0.          0. |            0.          0.          0. |            0.         0.0
FUEL COMB   |            0.          0.          0. |            0.          0.          0. |            0.         0.0
SOLV PURCH  |            0.          0.          0. |            0.          0.          0. |            0.         0.0
MISC        |            0.          0.          0. |            0.          0.          0. |            0.         0.0
---------------------------------------------------------------------------------------------------------------
            |            0.          0.          0. |        -9089.         71.          0. |        -9089.         0.0
```

```
Results of Emission Projection for Region  14
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:51 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                 Proj Year = 1985                   |
ID          |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |         0         0    224238     46435     46435  79.3 |         0         0    227925     32603     32603  85.7 |  -29.8
CHEM MFG    |         0         0     52015     13660     13660  73.7 |         0         0     58503     10409     10409  82.2 |  -23.8
SURF COATG  |         0         0    180144    132027    132027  26.7 |         0         0    197653     99230     99230  49.8 |  -24.8
FUEL COMB   |         0         0      6899      6899      6899   0.0 |         0         0      6289      6289      6289   0.0 |   -8.8
SOLV PURCH  |         0         0    246769    246769    246769   0.0 |         0         0    256417    256417    256417   0.0 |    3.9
MISC        |         0         0     48734      9809      9809  79.9 |         0         0     43538      7825      7825  82.0 |  -20.2
----------------------------------------------------------------------------------------------------------------------------
            |         0         0    758799    455599    455599  40.0 |         0         0    790325    412773    412773  47.8 |   -9.4
```

```
Results of Cost Analysis for Region 14
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:51 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980             |          Proj Year = 1985              |
ID          |          Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |    384486600.     177803.       2162. |    495130900.     195322.       2535. |   110644300.        28.8
CHEM MFG    |      5529080.      38355.        144. |      9053924.      48094.        188. |     3524844.        63.8
SURF COATG  |      8659682.      48117.        180. |     25288310.      98423.        257. |    16628630.       192.0
FUEL COMB   |            0.          0.          0. |            0.          0.          0. |            0.         0.0
SOLV PURCH  |            0.          0.          0. |            0.          0.          0. |            0.         0.0
MISC        |      8638698.      38925.        222. |      7921608.      35713.        222. |     -717091.        -8.3
---------------------------------------------------------------------------------------------------------------
            |    407314000.     303200.       1343. |    537394800.     377552.       1423. |   130080700.        31.9
```

```
Results of Emission Projection for Region  15
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:51 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                |                  Proj Year = 1985                |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   156517    11491     3781     2322    13813  91.4 |   148484    11221     3586     1132    12353  91.9 |  -10.6
CHEM MFG    |   267841    12558   718440     7996    20554  97.9 |   314224    13855   847369     6053    19909  98.3 |   -3.1
SURF COATG  |   232564    51084     7519     4378    55462  76.9 |   275019    60864     8683     2578    63442  77.6 |   14.4
FUEL COMB   |    10890    10866      308      308    11174   0.2 |    10862    10835      341      340    11175   0.2 |    0.0
SOLV PURCH  |   152202   152202    20755    20755   172957   0.0 |   181468   181468    24746    24746   206214   0.0 |   19.2
MISC        |    29461    16165      561      280    16445  45.2 |    33830    19438      638      286    19724  42.8 |   19.9
---------------------------------------------------------------------------------------------------------------------------
            |   849475   254366   751364    36039   290405  81.9 |   963887   297681   885363    35135   332816  82.0 |   14.6
```

```
Results of Cost Analysis for Region 15
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:51 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980          |         Proj Year = 1985          |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |     Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------
PETROLEUM   |   89383120.    146485.       610. |   95297730.    139717.       682. |    5914608.        6.6
CHEM MFG    |  -46995860.    965727.         0. |  -55182800.   1141684.         0. |   -8186932.        0.0
SURF COATG  |   41104740.    184621.       223. |   49185270.    220260.       223. |    8080528.       19.7
FUEL COMB   |          0.        24.         0. |          0.        27.         0. |          0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |          0.        0.0
MISC        |    3012096.     13577.       222. |    3271111.     14745.       222. |     259015.        8.6
------------------------------------------------------------------------------------------------------
            |   86504100.   1310434.        66. |   92571320.   1516434.        61. |    6067224.        7.0
```

```
Results of Emission Projection for Region  16
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:51 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                |                  Proj Year = 1985                |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      111      111        0        0      111   0.0 |      111       95        0        0       95  14.5 |  -14.4
CHEM MFG    |   108754    24323        0        0    24323  77.6 |   136202    27066        0        0    27066  80.1 |   11.3
SURF COATG  |     3661     3549        0        0     3549   3.1 |     4064     3951        0        0     3951   2.8 |   11.3
FUEL COMB   |     5475     5475        0        0     5475   0.0 |     4749     4749        0        0     4749   0.0 |  -13.3
SOLV PURCH  |    68776    68776        0        0    68776   0.0 |    73437    73437        0        0    73437   0.0 |    6.8
MISC        |      788      738        0        0      738   6.3 |      764      704        0        0      704   7.8 |   -4.6
---------------------------------------------------------------------------------------------------------------------------
            |   187565   102972        0        0   102972  45.1 |   219327   110002        0        0   110002  49.8 |    6.8
```

```
Results of Cost Analysis for Region 16
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:51 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980          |         Proj Year = 1985          |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |     Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------
PETROLEUM   |          0.         0.         0. |       3566.        16.       222. |       3566.        0.0
CHEM MFG    |   -1048219.     84431.         0. |   -1356636.    109136.         0. |    -308417.        0.0
SURF COATG  |     25424.       112.       227. |      25679.       113.       227. |        255.        1.0
FUEL COMB   |          0.         0.         0. |          0.         0.         0. |          0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |          0.        0.0
MISC        |     11364.        50.       227. |      13514.        60.       226. |       2150.       18.9
------------------------------------------------------------------------------------------------------
            |   -1011431.     84593.         0. |   -1313877.    109325.         0. |    -302446.        0.0
```

```
Results of Emission Projection for Region  17
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:52 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat      |                 Base Year = 1980                     |                 Proj Year = 1985                     |
ID           | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM    |   216620    22611     8215     4282    26893  88.0 |   223950    21827     8304     2102    23929  89.7 |  -11.0
CHEM MFG     |     3745     3745       43       43     3788   0.0 |     4713     4713       44       34     4747   0.2 |   25.3
SURF COATG   |     2651     2651     2743     2743     5394   0.0 |     3124     3124     3262     2261     5385  15.7 |   -0.2
FUEL COMB    |    79920    79920     4659     4659    84579   0.0 |    72958    72958     3950     3950    76908   0.0 |   -9.1
SOLV PURCH   |    35310    35310     4364     4364    39674   0.0 |    40954    40954     5062     5062    46015   0.0 |   16.0
MISC         |      328      328     1472     1472     1800   0.0 |      355      355     1621     1577     1932   2.2 |    7.3
---------------------------------------------------------------------------------------------------------------------------
             |   338574   144565    21496    17563   162128  55.0 |   346054   143931    22244    14986   158916  56.9 |   -2.0
```

```
Results of Cost Analysis for Region 17
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:52 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat      |          Base Year = 1980             |          Proj Year = 1985             |
ID           |          Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM    |    461402800.     197942.       2331. |    479571800.     208325.       2302. |   18169020.         3.9
CHEM MFG     |            0.          0.          0. |         2975.         11.        275. |       2975.         0.0
SURF COATG   |            0.          0.          0. |       222852.       1001.        223. |     222852.         0.0
FUEL COMB    |            0.          0.          0. |            0.          0.          0. |          0.         0.0
SOLV PURCH   |            0.          0.          0. |            0.          0.          0. |          0.         0.0
MISC         |            0.          0.          0. |         9791.         44.        222. |       9791.         0.0
------------------------------------------------------------------------------------------------------------
             |    461402800.     197942.       2331. |    479807500.     209381.       2292. |   18404640.         4.0
```

```
Results of Emission Projection for Region  18
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:52 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat      |                 Base Year = 1980                     |                 Proj Year = 1985                     |
ID           | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM    |     1906      573    41135    20019    20592  52.2 |     2076      490    45893    13596    14086  70.6 |  -31.6
CHEM MFG     |     7839     4842   157562    69345    74187  55.1 |     7877     6509   179246    51552    58061  69.0 |  -21.7
SURF COATG   |     1776     1662    40529    18404    20066  52.6 |     2155      958    48640    14274    15232  70.0 |  -24.1
FUEL COMB    |     1822      367     5630     5232     5599  24.9 |     2114      663     5334     4543     5206  30.1 |   -7.0
SOLV PURCH   |     3533     3533    46945    46945    50478   0.0 |     4114     4114    54660    54660    58774   0.0 |   16.4
MISC         |     2512     1057    19668     6969     8026  63.8 |     2886      771    22413     7153     7924  68.7 |   -1.3
---------------------------------------------------------------------------------------------------------------------------
             |    19388    12034   311469   166914   178948  45.9 |    21222    13504   356185   145779   159283  57.8 |  -11.0
```

```
Results of Cost Analysis for Region 18
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:52 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat      |          Base Year = 1980             |          Proj Year = 1985             |
ID           |          Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM    |     45137620.      22449.       2011. |     58969300.      33883.       1740. |   13831680.        30.6
CHEM MFG     |      3465031.      91214.         38. |     10253970.     129062.         79. |    6788943.       195.9
SURF COATG   |      3892722.      22239.        175. |      9011382.      35563.        253. |    5118660.       131.5
FUEL COMB    |            0.       1853.          0. |            0.       2241.          0. |          0.         0.0
SOLV PURCH   |            0.          0.          0. |            0.          0.          0. |          0.         0.0
MISC         |      3150084.      14154.        223. |      3912799.      17375.        225. |     762715.        24.2
------------------------------------------------------------------------------------------------------------
             |     55645460.     151909.        366. |     82147460.     218124.        377. |   26502000.        47.6
```

```
Results of Emission Projection for Region  19
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:53 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                  Proj Year = 1985                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0   700999   103958   103958  85.2 |        0        0   791647    59376    59376  92.5 |  -42.9
CHEM MFG   |        0        0   955331   176474   176474  81.5 |        0        0  1259283   131143   131143  89.6 |  -25.7
SURF COATG |        0        0    12269    10850    10850  11.6 |        0        0    12863     8991     8991  30.1 |  -17.1
FUEL COMB  |        0        0    36288    31269    31269  13.8 |        0        0    31732    27390    27390  13.7 |  -12.4
SOLV PURCH |        0        0    39957    39957    39957   0.0 |        0        0    42162    42162    42162   0.0 |    5.5
MISC       |        0        0    10728    10212    10212   4.8 |        0        0    11619     8141     8141  29.9 |  -20.3
------------------------------------------------------------------------------------------------------------------------------
           |        0        0  1755572   372720   372720  78.8 |        0        0  2149307   277201   277201  87.1 |  -25.6
```

```
Results of Cost Analysis for Region 19
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:53 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980          |           Proj Year = 1985          |
ID         |        Cost    Emis Red   Cost Eff |        Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  | 1214326000.     597041.      2034. | 2962045000.     732272.      4045. | 1747719000.      143.9
CHEM MFG   |   71472330.     778857.        92. |   94080860.    1128140.        83. |   22608540.       31.6
SURF COATG |     322113.       1419.       227. |     878993.       3872.       227. |     556880.      172.9
FUEL COMB  |          0.       5019.         0. |          0.       4343.         0. |          0.        0.0
SOLV PURCH |          0.          0.         0. |          0.          0.         0. |          0.        0.0
MISC       |      95238.        516.       185. |     752130.       3479.       216. |     656892.      689.7
-------------------------------------------------------------------------------------------------------------
           | 1286216000.    1382852.       930. | 3057757000.    1872106.      1633. | 1771542000.      137.7
```

```
Results of Emission Projection for Region  20
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:53 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                  Proj Year = 1985                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     5828     5600     6133     6133    11733   1.9 |     6841     5695     7115     2709     8404  39.8 |  -28.4
CHEM MFG   |        0        0     2702     2702     2702   0.0 |        0        0     3479     2029     2029  41.7 |  -24.9
SURF COATG |      177      177     6900     3630     3807  46.2 |      219      113     8515     3042     3154  63.9 |  -17.1
FUEL COMB  |      573      573      667      667     1240   0.0 |      670      670      791      791     1461   0.0 |   17.8
SOLV PURCH |     7463     7463    13860    13860    21323   0.0 |     9045     9045    16798    16798    25843   0.0 |   21.2
MISC       |      648      648      194      191      839   0.4 |      710      710      245      155      864   9.5 |    3.0
------------------------------------------------------------------------------------------------------------------------------
           |    14689    14461    30456    27183    41644   7.8 |    17484    16232    36943    25525    41757  23.3 |    0.3
```

```
Results of Cost Analysis for Region 20
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:53 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980          |           Proj Year = 1985          |
ID         |        Cost    Emis Red   Cost Eff |        Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |     531468.        228.      2331. |    1580736.       5552.       285. |    1049268.      197.4
CHEM MFG   |          0.          0.         0. |     353008.       1450.       243. |     353008.        0.0
SURF COATG |     742290.       3270.       227. |    1232874.       5579.       221. |     490584.       66.1
FUEL COMB  |          0.          0.         0. |          0.          0.         0. |          0.        0.0
SOLV PURCH |          0.          0.         0. |          0.          0.         0. |          0.        0.0
MISC       |        258.          3.        86. |      19038.         90.       211. |      18780.     7278.9
-------------------------------------------------------------------------------------------------------------
           |    1274016.       3501.       364. |    3185655.      12671.       251. |    1911639.      150.0
```

```
Results of Emission Projection for Region  21
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:53 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                     |                   Proj Year = 1985                     |
ID          | Unc Attn Ctr Attn    Unc NA     Ctr NA  Tot Ctr     LOC | Unc Attn Ctr Attn    Unc NA     Ctr NA  Tot Ctr     LOC |    %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   266372    32364         0          0    32364    87.9 |   302526    29538         0          0    29538    90.2 |    -8.7
CHEM MFG    |    69931     3582         0          0     3582    94.9 |    73013     4151         0          0     4151    94.3 |    15.9
SURF COATG  |    22226    19548        85         85    19633    12.0 |    24576    21606        94         50    21656    12.2 |    10.3
FUEL COMB   |     2559     2559        24         24     2583     0.0 |     2470     2470        24         24     2494     0.0 |    -3.4
SOLV PURCH  |    64450    64450       641        641    65091     0.0 |    73562    73562       732        732    74293     0.0 |    14.1
MISC        |    64555    18928      1454        257    19185    70.9 |    68420    16388      1229        265    16653    76.1 |   -13.2
----------------------------------------------------------------------------------------------------------------------------
            |   490093   141431      2204       1007   142438    71.1 |   544568   147716      2078       1070   148786    72.8 |     4.5
```

```
Results of Cost Analysis for Region 21
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:53 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980             |            Proj Year = 1985             |
ID          |        Cost     Emis Red     Cost Eff |           Cost     Emis Red     Cost Eff |      Abs Chg     Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |    5568460.     234008.          24. |       8549116.     272989.          31. |     2980656.         53.5
CHEM MFG    |  116262600.      66349.        1752. |     121771300.      68862.        1768. |     5508736.          4.7
SURF COATG  |    1356315.       2678.         506. |       1699526.       3014.         564. |      343211.         25.3
FUEL COMB   |          0.          0.           0. |             0.          0.           0. |           0.          0.0
SOLV PURCH  |          0.          0.           0. |             0.          0.           0. |           0.          0.0
MISC        |    9935896.      46824.         212. |      11370670.      52996.         215. |     1434774.         14.4
-------------------------------------------------------------------------------------------------------------
            |  133123300.     349859.         381. |     143390600.     397861.         360. |    10267380.          7.7
```

```
Results of Emission Projection for Region  22
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:53 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                     |                   Proj Year = 1985                     |
ID          | Unc Attn Ctr Attn    Unc NA     Ctr NA  Tot Ctr     LOC | Unc Attn Ctr Attn    Unc NA     Ctr NA  Tot Ctr     LOC |    %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0     13399      10197    10197    23.9 |        0        0     14372       4900     4900    65.9 |   -51.9
CHEM MFG    |        0        0      8511       8498     8498     0.2 |        0        0      8678       6375     6375    26.5 |   -25.0
SURF COATG  |        0        0     43410      42534    42534     2.0 |        0        0     44468      32354    32354    27.2 |   -23.9
FUEL COMB   |        0        0     30471      30471    30471     0.0 |        0        0     32283      32283    32283     0.0 |     5.9
SOLV PURCH  |        0        0    160850     160850   160850     0.0 |        0        0    193731     193731   193731     0.0 |    20.4
MISC        |        0        0     14104      14078    14078     0.2 |        0        0     15154      11366    11366    25.0 |   -19.3
----------------------------------------------------------------------------------------------------------------------------
            |        0        0    270745     266628   266628     1.5 |        0        0    308686     281009   281009     9.0 |     5.4
```

```
Results of Cost Analysis for Region 22
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:53 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980             |            Proj Year = 1985             |
ID          |        Cost     Emis Red     Cost Eff |           Cost     Emis Red     Cost Eff |      Abs Chg     Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |    3317382.       3202.        1036. |       7302908.       9472.         771. |     3985526.        120.1
CHEM MFG    |       2886.         13.         222. |       2268301.       2303.         985. |     2265415.      78496.7
SURF COATG  |    -218889.        876.           0. |       7584618.      12114.         626. |     7803507.          0.0
FUEL COMB   |          0.          0.           0. |             0.          0.           0. |           0.          0.0
SOLV PURCH  |          0.          0.           0. |             0.          0.           0. |           0.          0.0
MISC        |       4446.         26.         171. |       1258905.       3788.         332. |     1254459.      28215.5
-------------------------------------------------------------------------------------------------------------
            |    3105825.       4117.         754. |      18414730.      27678.         665. |    15308910.        492.9
```

```
Results of Emission Projection for Region  23
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:54 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------------
Ind Cat      |                 Base Year = 1980                     |                 Proj Year = 1985                       |
ID           | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------------
PETROLEUM    |        0        0   394595    34773    34773  91.2 |        0        0   427397    25957    25957  93.9 |  -25.4
CHEM MFG     |        0        0    34445    34384    34384   0.2 |        0        0    40174    25695    25695  36.0 |  -25.3
SURF COATG   |        0        0   145042   135825   135825   6.4 |        0        0   186270   106951   106951  42.6 |  -21.3
FUEL COMB    |        0        0    13960    13960    13960   0.0 |        0        0    13221    13221    13221   0.0 |   -5.3
SOLV PURCH   |        0        0   261240   261240   261240   0.0 |        0        0   316161   316161   316161   0.0 |   21.0
MISC         |        0        0    36112    23412    23412  35.2 |        0        0    38434    22642    22642  41.1 |   -3.3
------------------------------------------------------------------------------------------------------------------------------------
             |        0        0   885394   503594   503594  43.1 |        0        0  1021657   510627   510627  50.0 |    1.4
```

```
Results of Cost Analysis for Region 23
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:54 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat      |          Base Year = 1980           |           Proj Year = 1985              |
ID           |        Cost     Emis Red   Cost Eff |         Cost     Emis Red   Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM    |  838745100.      359822.      2331. |  1092678000.      401441.      2722. |   253932500.        30.3
CHEM MFG     |      13542.          61.       222. |     3174234.       14478.       219. |     3160692.     23339.9
SURF COATG   |    2075429.        9217.       225. |    26145720.       79319.       330. |    24070290.      1159.8
FUEL COMB    |          0.           0.         0. |           0.           0.         0. |           0.         0.0
SOLV PURCH   |          0.           0.         0. |           0.           0.         0. |           0.         0.0
MISC         |    3394086.       12700.       267. |     4124024.       15792.       261. |      729938.        21.5
--------------------------------------------------------------------------------------------------------------
             |  844228200.      381800.      2211. |  1126122000.      511030.      2204. |   281893400.        33.4
```

```
Results of Emission Projection for Region  24
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:54 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------------
Ind Cat      |                 Base Year = 1980                     |                 Proj Year = 1985                       |
ID           | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------------
PETROLEUM    |    26778    24304        0        0    24304   9.2 |    27526    22709        0        0    22709  17.5 |   -6.6
CHEM MFG     |     2259     2236        0        0     2236   1.0 |     2576     2543        0        0     2543   1.3 |   13.7
SURF COATG   |    36824    34337        0        0    34337   6.8 |    47133    42228        0        0    42228  10.4 |   23.0
FUEL COMB    |     5396     5396        0        0     5396   0.0 |     5180     5180        0        0     5180   0.0 |   -4.0
SOLV PURCH   |    92937    92937        0        0    92937   0.0 |   118896   118896        0        0   118896   0.0 |   27.9
MISC         |     1615     1599        0        0     1599   1.0 |     1842     1823        0        0     1823   1.0 |   14.0
------------------------------------------------------------------------------------------------------------------------------------
             |   165809   160809        0        0   160809   3.0 |   203154   193378        0        0   193378   4.8 |   20.3
```

```
Results of Cost Analysis for Region 24
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:54 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat      |          Base Year = 1980           |           Proj Year = 1985              |
ID           |        Cost     Emis Red   Cost Eff |         Cost     Emis Red   Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM    |    2816847.        2474.      1139. |     3263066.        4818.       677. |      446219.        15.8
CHEM MFG     |       2760.          23.       120. |        9016.          33.       270. |        6256.       226.7
SURF COATG   |    -535868.        2487.         0. |      891129.        4905.       182. |     1426997.         0.0
FUEL COMB    |          0.           0.         0. |           0.           0.         0. |           0.         0.0
SOLV PURCH   |          0.           0.         0. |           0.           0.         0. |           0.         0.0
MISC         |          0.          16.         0. |           0.          19.         0. |           0.         0.0
--------------------------------------------------------------------------------------------------------------
             |    2283739.        5000.       457. |     4163210.        9776.       426. |     1879471.        82.3
```

```
Results of Emission Projection for Region  25
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:54 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                    |                 Proj Year = 1985                    |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    21851    21851        0        0    21851   0.0 |    22383    21121        0        0    21121   5.6 |   -3.3
CHEM MFG   |   109914     2680        0        0     2680  97.6 |   147823     3303        0        0     3303  97.8 |   23.2
SURF COATG |    10399    10399        0        0    10399   0.0 |    13267    13267        0        0    13267   0.0 |   27.6
FUEL COMB  |    37088    37088        0        0    37088   0.0 |    37524    37524        0        0    37524   0.0 |    1.2
SOLV PURCH |    57933    57933        0        0    57933   0.0 |    71199    71199        0        0    71199   0.0 |   22.9
MISC       |     4085     4085        0        0     4085   0.0 |     4947     4947        0        0     4947   0.0 |   21.1
-----------------------------------------------------------------------------------------------------------------------------
           |   241270   134036        0        0   134036  44.4 |   297144   151360        0        0   151360  49.1 |   12.9


Results of Cost Analysis for Region 25
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:54 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980             |          Proj Year = 1985             |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |           0.         0.         0. |     -217522.      1263.         0. |     -217522.        0.0
CHEM MFG   |    -7291011.    107234.         0. |    -9824361.    144521.         0. |    -2533350.        0.0
SURF COATG |           0.         0.         0. |           0.         0.         0. |           0.        0.0
FUEL COMB  |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC       |           0.         0.         0. |           0.         0.         0. |           0.        0.0
-------------------------------------------------------------------------------------------------------------
           |    -7291011.    107234.         0. |   -10041880.    145783.         0. |    -2750872.        0.0


Results of Emission Projection for Region  26
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:55 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                    |                 Proj Year = 1985                    |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    56190     6224     7202     4618    10842  82.9 |    61538     6257     7405     2239     8496  87.7 |  -21.6
CHEM MFG   |    53376    49170       21       21    49191   7.9 |    55302    50739       22       15    50754   8.3 |    3.2
SURF COATG |   210081    55459    46672    46654   102113  60.2 |   252500    97405    56759    12792   110197  64.4 |    7.9
FUEL COMB  |     2253     2163      441      441     2604   3.3 |     2398     2317      465      448     2765   3.4 |    6.2
SOLV PURCH |    92524    92524    37792    37792   130316   0.0 |   114257   114257    46669    46669   160926   0.0 |   23.5
MISC       |    42599    11941       66       66    12007  71.9 |    49601    13645       66       54    13699  72.4 |   14.1
-----------------------------------------------------------------------------------------------------------------------------
           |   457023   217481    92194    89592   307073  44.1 |   535597   284620   111386    62217   346837  46.4 |   12.9


Results of Cost Analysis for Region 26
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:55 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980             |          Proj Year = 1985             |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |   105914600.     52550.      2016. |   117261400.     60447.      1940. |    11346810.       10.7
CHEM MFG   |      125146.      4206.        30. |      126736.      4570.        28. |        1590.        1.3
SURF COATG |    34307510.    154640.       222. |    38836430.    199063.       195. |     4528924.       13.2
FUEL COMB  |           0.        90.         0. |           0.        99.         0. |           0.        0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC       |     6803634.     30658.       222. |     7981617.     35969.       222. |     1177983.       17.3
-------------------------------------------------------------------------------------------------------------
           |   147150900.    242144.       608. |   164206200.    300147.       547. |    17055300.       11.6
```

```
Results of Emission Projection for Region  27
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:55 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                    |                   Proj Year = 1985                    |
ID         | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    36087     9381         0         0      9381  74.0 |    36640     8912         0         0      8912  75.7 |   -5.0
CHEM MFG   |      131      131         0         0       131   0.0 |      147      147         0         0       147   0.0 |   12.3
FUEL COMB  |     2632     2632         0         0      2632   0.0 |     2291     2291         0         0      2291   0.0 |  -13.0
SOLV PURCH |     5079     5079         0         0      5079   0.0 |     5553     5553         0         0      5553   0.0 |    9.3
MISC       |     1351     1333         0         0      1333   1.3 |     1272     1255         0         0      1255   1.3 |   -5.8
-----------------------------------------------------------------------------------------------------------------------------------
           |    45280    18556         0         0     18556  59.0 |    45903    18158         0         0     18158  60.4 |   -2.1
```

```
Results of Cost Analysis for Region 27
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:55 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |          Proj Year = 1985           |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |    61795050.     26706.      2314. |    64151970.     27728.      2314. |     2356924.        3.8
CHEM MFG   |           0.         0.         0. |           0.         0.         0. |           0.        0.0
FUEL COMB  |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC       |        3996.        18.       222. |        3801.        17.       222. |        -195.       -4.9
--------------------------------------------------------------------------------------------------------------
           |    61799040.     26724.      2312. |    64155770.     27745.      2312. |     2356728.        3.8
```

```
Results of Emission Projection for Region  28
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:55 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                    |                   Proj Year = 1985                    |
ID         | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      933      933      2387      2330      3263   1.7 |      934      838      2605      1964      2802  20.8 |  -14.1
CHEM MFG   |      485      485         0         0       485   0.0 |      501      501         0         0       501   0.0 |    3.4
SURF COATG |    31591    31561     20235      9792     41353  20.2 |    39934    34907     25189     11241     46149  29.1 |   11.6
FUEL COMB  |     2097     2097       481       481      2578   0.0 |     2002     2002       426       426      2427   0.0 |   -5.8
SOLV PURCH |    13924    13924      4892      4892     18816   0.0 |    16553    16553      5816      5816     22369   0.0 |   18.9
MISC       |       64       64        10        10        74   0.0 |       69       69        11        10        78   0.9 |    5.9
-----------------------------------------------------------------------------------------------------------------------------------
           |    49094    49064     28005     17505     66569  13.7 |    59993    54870     34047     19457     74327  21.0 |   11.7
```

```
Results of Cost Analysis for Region 28
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:55 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |          Proj Year = 1985           |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |      132867.        57.      2331. |      201569.       738.       273. |       68702.       51.7
CHEM MFG   |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SURF COATG |     1725951.     10473.       165. |     3473047.     18974.       183. |     1747096.      101.2
FUEL COMB  |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC       |           0.         0.         0. |         158.         1.       222. |         158.        0.0
--------------------------------------------------------------------------------------------------------------
           |     1858818.     10530.       177. |     3674774.     19713.       186. |     1815956.       97.7
```

```
Results of Emission Projection for Region  29
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:56 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                   |                 Proj Year = 1985                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      527      527     3980     1686     2213  50.9 |      553      518     4603     1236     1754  66.0 |  -20.8
SURF COATG |     1181     1181        0        0     1181   0.0 |     1494     1494        0        0     1494   0.0 |   26.5
FUEL COMB  |       48       48      181      181      229   0.0 |       59       59      216      216      275   0.0 |   20.1
SOLV PURCH |     1450     1450     1445     1445     2895   0.0 |     1964     1964     1958     1958     3922   0.0 |   35.5
MISC       |        0        0        1        1        1   0.0 |        0        0        1        1        1  13.7 |  -16.9
----------------------------------------------------------------------------------------------------------------------------
           |     3206     3206     5607     3313     6519  26.0 |     4071     4036     6778     3410     7446  31.4 |   14.2


Results of Cost Analysis for Region 29
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:56 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980          |          Proj Year = 1985          |
ID         |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |     Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |    1329053.      2294.       579. |    2249870.      3403.       661. |    920817.        69.3
SURF COATG |          0.         0.         0. |          0.         0.         0. |         0.         0.0
FUEL COMB  |          0.         0.         0. |          0.         0.         0. |         0.         0.0
SOLV PURCH |          0.         0.         0. |          0.         0.         0. |         0.         0.0
MISC       |          0.         0.         0. |         29.         0.         0. |        29.         0.0
--------------------------------------------------------------------------------------------------------------
           |    1329053.      2294.       579. |    2249899.      3403.       661. |    920846.        69.3


Results of Emission Projection for Region  30
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:56 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                   |                 Proj Year = 1985                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0    59410     3846     3846  93.5 |        0        0    78442     2530     2530  96.8 |  -34.2
CHEM MFG   |        0        0      526      526      526   0.0 |        0        0      750      387      387  48.4 |  -26.4
SURF COATG |        0        0    21951    14618    14618  33.4 |        0        0    28100    11898    11898  57.7 |  -18.6
FUEL COMB  |        0        0      241      241      241   0.0 |        0        0      289      289      289   0.0 |   19.9
SOLV PURCH |        0        0    27436    27436    27436   0.0 |        0        0    35739    35739    35739   0.0 |   30.3
MISC       |        0        0      632      632      632   0.0 |        0        0      766      664      664  13.3 |    5.1
----------------------------------------------------------------------------------------------------------------------------
           |        0        0   110196    47299    47299  57.1 |        0        0   144086    51508    51508  64.3 |    8.9


Results of Cost Analysis for Region 30
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:56 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980          |          Proj Year = 1985          |
ID         |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |     Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |  122062900.     55564.      2197. |  332500900.     75912.      4380. |  210437900.      172.4
CHEM MFG   |          0.         0.         0. |      80553.       363.       222. |      80553.        0.0
SURF COATG |    3768585.      7333.       514. |    6942182.     16202.       428. |    3173597.       84.2
FUEL COMB  |          0.         0.         0. |          0.         0.         0. |          0.        0.0
SOLV PURCH |          0.         0.         0. |          0.         0.         0. |          0.        0.0
MISC       |          0.         0.         0. |      26299.       102.       257. |      26299.        0.0
--------------------------------------------------------------------------------------------------------------
           |  125831500.     62897.      2001. |  339549900.     92579.      3668. |  213718400.      169.8
```

```
Results of Emission Projection for Region  31
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:56 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %    Retire Rate = 5.0   %    Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                |                 Proj Year = 1985                |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   408286    48137    48137  88.2 |        0        0   407962    37482    37482  90.8 |  -22.1
CHEM MFG    |        0        0   147127    21362    21362  85.5 |        0        0   161448    15341    15341  90.5 |  -28.2
SURF COATG  |        0        0    16779     9921     9921  40.9 |        0        0    19731     7827     7827  60.3 |  -21.1
FUEL COMB   |        0        0     8262     8160     8160   1.2 |        0        0     9785     9686     9686   1.0 |   18.7
SOLV PURCH  |        0        0   200270   200270   200270   0.0 |        0        0   236254   236254   236254   0.0 |   18.0
MISC        |        0        0   250278    67189    67189  73.2 |        0        0   261466    52871    52871  79.8 |  -21.3
------------------------------------------------------------------------------------------------------------------------------
            |        0        0  1031002   355039   355039  65.6 |        0        0  1096647   359460   359460  67.2 |    1.2
```

```
Results of Cost Analysis for Region 31
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:56 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %    Retire Rate = 5.0   %    Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |          Proj Year = 1985            |
ID          |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |  456773800.     360149.       1268. |  454289300.     370480.       1226. |   -2484416.       -0.5
CHEM MFG    |    1302154.     125765.         10. |    3318235.     146108.         23. |    2016081.      154.8
SURF COATG  |    1572060.       6858.        229. |    2657543.      11904.        223. |    1085483.       69.0
FUEL COMB   |          0.        102.          0. |          0.        100.          0. |          0.        0.0
SOLV PURCH  |          0.          0.          0. |          0.          0.          0. |          0.        0.0
MISC        |   82684060.     183089.        452. |   92786380.     208596.        445. |   10102320.       12.2
--------------------------------------------------------------------------------------------------------------
            |  542332000.     675963.        802. |  553051500.     737187.        750. |   10719490.        2.0
```

```
Results of Emission Projection for Region  32
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:56 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %    Retire Rate = 5.0   %    Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                |                 Proj Year = 1985                |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     9147     5195    23790    23790    28985  12.0 |    10226     5285    29617    20013    25298  36.5 |  -12.7
SURF COATG  |      350        7        0        0        7  98.0 |      465        9        0        0        9  98.0 |   32.8
FUEL COMB   |    22641    22641       47       47    22688   0.0 |    21105    21105       56       56    21161   0.0 |   -6.7
SOLV PURCH  |     4603     4603     3921     3921     8524   0.0 |     6171     6171     5257     5257    11429   0.0 |   34.1
MISC        |      677      677        5        5      682   0.0 |      745      745        5        4      749   0.2 |    9.8
------------------------------------------------------------------------------------------------------------------------------
            |    37418    33123    27763    27763    60886   6.6 |    38712    33316    34935    25331    58646  20.4 |   -3.7
```

```
Results of Cost Analysis for Region 32
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:56 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %    Retire Rate = 5.0   %    Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |          Proj Year = 1985            |
ID          |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |    9212112.       3952.       2331. |    9080337.      14544.        624. |    -131775.       -1.4
SURF COATG  |    1346961.        343.       3927. |    1788975.        456.       3927. |     442014.       32.8
FUEL COMB   |          0.          0.          0. |          0.          0.          0. |          0.        0.0
SOLV PURCH  |          0.          0.          0. |          0.          0.          0. |          0.        0.0
MISC        |          0.          0.          0. |        167.          1.        147. |        167.        0.0
--------------------------------------------------------------------------------------------------------------
            |   10559070.       4295.       2458. |   10869480.      15001.        725. |     310406.        2.9
```

```
Results of Emission Projection for Region  33
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:57 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                  |                  Proj Year = 1985                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1391     1279    24591    24591    25870   0.4 |     1386     1322    22957    19652    20973  13.8 |  -18.9
CHEM MFG    |      517      517     1151     1151     1668   0.0 |      557      461     1318      853     1314  29.9 |  -21.2
SURF COATG  |    15328    15328    26867    26867    42195   0.0 |    17144    17144    30015    22211    39355  16.5 |   -6.7
FUEL COMB   |     2564     2564     4055     4055     6619   0.0 |     2681     2681     4191     4191     6871   0.0 |    3.8
SOLV PURCH  |   126654   126654   225162   225162   351816   0.0 |   144490   144490   256870   256870   401359   0.0 |   14.1
MISC        |    32254    32254    35868    35404    67658   0.7 |    33268    32977    38024    33461    66438   6.8 |   -1.8
--------------------------------------------------------------------------------------------------------------------------------
            |   178708   178596   317694   317230   495826   0.1 |   199525   199074   353375   337237   536311   3.0 |    8.2


Results of Cost Analysis for Region 33
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:57 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980          |        Proj Year = 1985          |
ID          |       Cost     Emis Red  Cost Eff |       Cost     Emis Red  Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |     -2688.       112.        0. |     -68698.      3370.        0. |      -66010.        0.0
CHEM MFG    |         0.         0.        0. |     168515.       561.      301. |      168515.        0.0
SURF COATG  |         0.         0.        0. |    1730174.      7804.      222. |     1730174.        0.0
FUEL COMB   |         0.         0.        0. |          0.         0.        0. |           0.        0.0
SOLV PURCH  |         0.         0.        0. |          0.         0.        0. |           0.        0.0
MISC        |    225504.       464.      486. |    2346490.      4854.      483. |     2120986.      940.6
--------------------------------------------------------------------------------------------------------------
            |    222816.       576.      387. |    4176480.     16588.      252. |     3953664.     1774.4


Results of Emission Projection for Region  34
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:57 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                  |                  Proj Year = 1985                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    36054     7996     5480     2098    10094  75.7 |    39910     8641     6717      920     9561  79.5 |   -5.3
CHEM MFG    |  1091207    39849     2283     2283    42132  96.1 |  1211016    46588     2785      646    47235  96.1 |   12.1
SURF COATG  |    40170    38793      819      819    39612   3.4 |    58496    56704     1100      568    57272   3.9 |   44.6
FUEL COMB   |     8050     8050      247      247     8297   0.0 |     8912     8912      246      246     9158   0.0 |   10.4
SOLV PURCH  |   128112   128112     6743     6743   134855   0.0 |   160340   160340     8439     8439   168779   0.0 |   25.2
MISC        |    59673    12454        0        0    12454  79.1 |    63547    13143        0        0    13143  79.3 |    5.5
--------------------------------------------------------------------------------------------------------------------------------
            |  1363266   235254    15572    12190   247444  82.1 |  1542220   294328    19288    10819   305147  80.5 |   23.3


Results of Cost Analysis for Region 34
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:57 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980          |        Proj Year = 1985          |
ID          |       Cost     Emis Red  Cost Eff |       Cost     Emis Red  Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |  30330310.     31440.      965. |   37192500.     37067.     1003. |     6862192.       22.6
CHEM MFG    | -11556510.   1051358.        0. |  -12405690.   1166567.        0. |     -849176.        0.0
SURF COATG  |    312579.      1377.      227. |     594094.      2324.      256. |      281515.       90.1
FUEL COMB   |         0.         0.        0. |          0.         0.        0. |           0.        0.0
SOLV PURCH  |         0.         0.        0. |          0.         0.        0. |           0.        0.0
MISC        |  21567230.     47219.      457. |   23039830.     50404.      457. |     1472596.        6.8
--------------------------------------------------------------------------------------------------------------
            |  40653620.   1131394.       36. |   48420740.   1256361.       39. |     7767124.       19.1
```

```
Results of Emission Projection for Region  35
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:57 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |              Base Year = 1980                   |               Proj Year = 1985                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1340     1340        0        0     1340   0.0 |     1209     1166        0        0     1166   3.5 |  -13.0
FUEL COMB   |      601      601        0        0      601   0.0 |      690      690        0        0      690   0.0 |   14.8
SOLV PURCH  |     4186     4186        0        0     4186   0.0 |     5353     5353        0        0     5353   0.0 |   27.9
------------------------------------------------------------------------------------------------------------------------------
            |     6127     6127        0        0     6127   0.0 |     7251     7209        0        0     7209   0.6 |   17.7


Results of Cost Analysis for Region 35
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:57 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |          Proj Year = 1985            |
ID          |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM   |           0.          0.          0. |        -878.         43.          0. |       -878.         0.0
FUEL COMB   |           0.          0.          0. |           0.          0.          0. |          0.         0.0
SOLV PURCH  |           0.          0.          0. |           0.          0.          0. |          0.         0.0
---------------------------------------------------------------------------------------------------------
            |           0.          0.          0. |        -878.         43.          0. |       -878.         0.0


Results of Emission Projection for Region  36
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:58 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |              Base Year = 1980                   |               Proj Year = 1985                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    93995    20404    20404  78.3 |        0        0    81756    15750    15750  80.7 |  -22.8
CHEM MFG    |        0        0    91620    23471    23471  74.4 |        0        0   104207    17645    17645  83.1 |  -24.8
SURF COATG  |        0        0   175053    93074    93074  46.8 |        0        0   211498    72553    72553  65.7 |  -22.0
FUEL COMB   |        0        0    25278    25278    25278   0.0 |        0        0    22523    22523    22523   0.0 |  -10.9
SOLV PURCH  |        0        0   334152   334152   334152   0.0 |        0        0   379170   379170   379170   0.0 |   13.5
MISC        |        0        0    49990    21382    21382  57.2 |        0        0    50898    18403    18403  63.8 |  -13.9
------------------------------------------------------------------------------------------------------------------------------
            |        0        0   770088   517761   517761  32.8 |        0        0   850053   526044   526044  38.1 |    1.6


Results of Cost Analysis for Region 36
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:58 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |          Proj Year = 1985            |
ID          |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM   |    24973600.      73591.        339. |    24349850.      66007.        369. |    -623750.        -2.5
CHEM MFG    |     3310755.      68149.         49. |     5644107.      86562.         65. |    2333352.        70.5
SURF COATG  |    15385890.      81979.        188. |    31527970.     138946.        227. |   16142080.       104.9
FUEL COMB   |           0.          0.          0. |           0.          0.          0. |          0.         0.0
SOLV PURCH  |           0.          0.          0. |           0.          0.          0. |          0.         0.0
MISC        |     6288756.      28608.        220. |     7091170.      32495.        218. |     802414.        12.8
---------------------------------------------------------------------------------------------------------
            |    49959010.     252327.        198. |    68613100.     324009.        212. |   18654090.        37.3
```

```
Results of Emission Projection for Region  37
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:58 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                    Base Year = 1980                  |                  Proj Year = 1985                   |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    58888    48710   650426    5503    54213   92.4 |   59837    43391   627874     7162    50553   92.6 |   -6.8
CHEM MFG    |     6106     4648     1619    1619     6267   18.9 |    8085     6722     2197      340     7062   31.3 |   12.7
SURF COATG  |   663776     1430     9173    4189     5619   99.2 |  849612     6723    11320      402     7124   99.2 |   26.8
FUEL COMB   |    35147    35147     9836    9836    44983    0.0 |   30398    30398     8816     8816    39214    0.0 |  -12.8
SOLV PURCH  |    34992    34992     8288    8288    43280    0.0 |   41379    41379     9801     9801    51180    0.0 |   18.3
MISC        |     2178     2178     1994     905     3083   26.1 |    2570     2570     2504      737     3308   34.8 |    7.3
------------------------------------------------------------------------------------------------------------------------------
            |   801087   127105   681336   30340   157445   89.4 |  991881   131183   662511    27258   158441   90.4 |    0.6


Results of Cost Analysis for Region 37
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:58 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980              |            Proj Year = 1985             |
ID          |         Cost     Emis Red     Cost Eff |         Cost     Emis Red     Cost Eff |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |    56565800.     655101.         86. |    62149900.     637158.          98. |    5584100.         9.9
CHEM MFG    |     1331154.       1458.        913. |     2884212.       3220.         896. |    1553058.       116.7
SURF COATG  |   118799200.     667330.        178. |   158178400.     853808.         185. |   39379280.        33.1
FUEL COMB   |          0.          0.          0. |           0.          0.           0. |          0.         0.0
SOLV PURCH  |          0.          0.          0. |           0.          0.           0. |          0.         0.0
MISC        |     241758.       1089.        222. |      387416.       1766.         219. |     145658.        60.2
-----------------------------------------------------------------------------------------------------------
            |   176937900.    1324978.        134. |   223600000.    1495951.         149. |   46662080.        26.4


Results of Emission Projection for Region  38
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:58 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                    Base Year = 1980                  |                  Proj Year = 1985                   |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   122071     6323      400      20     6343   94.8 |  136077     6990      446       16     7006   94.9 |   10.5
CHEM MFG    |    13331    13331     1112    1112    14443    0.0 |   15472    15472     1129      828    16300    1.8 |   12.9
SURF COATG  |     3434     3434     4735    4735     8169    0.0 |    4019     4015     4726     3649     7664   12.4 |   -6.2
FUEL COMB   |     7051     7051     2271    2271     9322    0.0 |    7007     7007     2288     2288     9295    0.0 |   -0.3
SOLV PURCH  |    34141    34141     8537    8537    42678    0.0 |   39464    39464     9868     9868    49332    0.0 |   15.6
MISC        |     3658     3658      536     536     4194    0.0 |    3975     3975      575      471     4446    2.3 |    6.0
------------------------------------------------------------------------------------------------------------------------------
            |   183686    67938    17591   17211    85149   57.7 |  206014    76924    19031    17119    94043   58.2 |   10.4


Results of Cost Analysis for Region 38
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:58 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980              |            Proj Year = 1985             |
ID          |         Cost     Emis Red     Cost Eff |         Cost     Emis Red     Cost Eff |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |   270694400.     116128.       2331. |   301834600.     129517.        2330. |   31140220.        11.5
CHEM MFG    |          0.          0.          0. |      37932.        300.         126. |      37932.         0.0
SURF COATG  |          0.          0.          0. |      91524.       1080.          85. |      91524.         0.0
FUEL COMB   |          0.          0.          0. |           0.          0.           0. |          0.         0.0
SOLV PURCH  |          0.          0.          0. |           0.          0.           0. |          0.         0.0
MISC        |          0.          0.          0. |      23057.        104.         222. |      23057.         0.0
-----------------------------------------------------------------------------------------------------------
            |   270694400.     116128.       2331. |   301987100.     131002.        2305. |   31292740.        11.6
```

```
Results of Emission Projection for Region  39
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:59 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0  %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |               Base Year = 1980                       |                 Proj Year = 1985                    |
ID          | Unc Attn Ctr Attn  Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn  Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0  231232    49846    49846  78.4 |        0        0  209384    37103    37103  82.3 |  -25.6
CHEM MFG    |        0        0   99770    16879    16879  83.1 |        0        0  101259    11115    11115  89.0 |  -34.2
SURF COATG  |        0        0  223368   126026   126026  43.6 |        0        0  240999    98874    98874  59.0 |  -21.5
FUEL COMB   |        0        0   14866    14746    14746   0.8 |        0        0   12401    12287    12287   0.9 |  -16.7
SOLV PURCH  |        0        0  295168   295168   295168   0.0 |        0        0  316260   316260   316260   0.0 |    7.1
MISC        |        0        0   61365    43464    43464  29.2 |        0        0   64598    37565    37565  41.8 |  -13.6
-------------------------------------------------------------------------------------------------------------------------------
            |        0        0  925769   546129   546129  41.0 |        0        0  944900   513205   513205  45.7 |   -6.0
```

```
Results of Cost Analysis for Region 39
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:59 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0  %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980            |          Proj Year = 1985            |
ID          |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg     Prct Chg
-------------------------------------------------------------------------------------------------------
PETROLEUM   |  279040000.     181386.      1538.  |  245530400.     172280.      1425.  |   -33509550.       -12.0
CHEM MFG    |     190628.      82891.         2.  |    7170995.      90144.        80.  |     6980367.      3561.8
SURF COATG  |   26654080.      97342.       274.  |   41673440.     142124.       293.  |    15019370.        56.3
FUEL COMB   |          0.        120.         0.  |          0.        114.         0.  |           0.         0.0
SOLV PURCH  |          0.          0.         0.  |          0.          0.         0.  |           0.         0.0
MISC        |    3843936.      17901.       215.  |    5864032.      27033.       217.  |     2020096.        52.6
-------------------------------------------------------------------------------------------------------
            |  309728600.     379640.       816.  |  300238900.     431695.       695.  |    -9489728.        -3.1
```

```
Results of Emission Projection for Region  41
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:59 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0  %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |               Base Year = 1980                       |                 Proj Year = 1985                    |
ID          | Unc Attn Ctr Attn  Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn  Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    3265     3037     3037   7.0 |        0        0    3557     1781     1781  49.9 |  -41.4
CHEM MFG    |        0        0    8059      497      497  93.8 |        0        0    9338      339      339  96.4 |  -31.7
SURF COATG  |        0        0   11578     8978     8978  22.5 |        0        0   12352     6918     6918  44.0 |  -22.9
FUEL COMB   |        0        0     149      149      149   0.0 |        0        0     156      156      156   0.0 |    5.0
SOLV PURCH  |        0        0   37388    37388    37388   0.0 |        0        0   43490    43490    43490   0.0 |   16.3
MISC        |        0        0     597      119      119  80.1 |        0        0     602       96       96  84.1 |  -19.4
-------------------------------------------------------------------------------------------------------------------------------
            |        0        0   61036    50168    50168  17.8 |        0        0   69496    52781    52781  24.1 |    5.2
```

```
Results of Cost Analysis for Region 41
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:59 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0  %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980            |          Proj Year = 1985            |
ID          |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg     Prct Chg
-------------------------------------------------------------------------------------------------------
PETROLEUM   |     531468.        228.      2331.  |    1744255.       1777.       982.  |     1212787.       228.2
CHEM MFG    |    -113430.       7562.         0.  |    -126386.       8999.         0.  |      -12956.         0.0
SURF COATG  |     512732.       2600.       197.  |    1953573.       5434.       360.  |     1440841.       281.0
FUEL COMB   |          0.          0.         0.  |          0.          0.         0.  |           0.         0.0
SOLV PURCH  |          0.          0.         0.  |          0.          0.         0.  |           0.         0.0
MISC        |      41108.        478.        86.  |      47487.        506.        94.  |        6379.        15.5
-------------------------------------------------------------------------------------------------------
            |     971878.      10868.        89.  |    3618930.      16715.       217.  |     2647052.       272.4
```

```
Results of Emission Projection for Region  42
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:59 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                    Base Year = 1980                    |                  Proj Year = 1985                    |
ID         |  Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |         0        0     58275      8087     8087  86.1 |         0        0     60528      5257     5257  91.3 |   -35.0
CHEM MFG   |         0        0     95982     33475    33475  65.1 |         0        0    107569     24947    24947  76.8 |   -25.5
SURF COATG |         0        0    196094    160290   160290  18.3 |         0        0    285042    122612   122612  57.0 |   -23.5
FUEL COMB  |         0        0      4684      4684     4684   0.0 |         0        0      4830      4830     4830   0.0 |     3.1
SOLV PURCH |         0        0     70020     70020    70020   0.0 |         0        0     84537     84537    84537   0.0 |    20.7
MISC       |         0        0     27592     20581    20581  25.4 |         0        0     28618     16850    16850  41.1 |   -18.1
--------------------------------------------------------------------------------------------------------------------------
           |         0        0    452647    297137   297137  34.4 |         0        0    571124    259032   259032  54.6 |   -12.8
```

```
Results of Cost Analysis for Region 42
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:59 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980          |           Proj Year = 1985          |
ID         |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM  |    21976620.     50188.       438. |    29020960.     55271.       525. |    7044340.        32.1
CHEM MFG   |    -1789561.     62507.         0. |     -361326.     82622.         0. |    1428235.         0.0
SURF COATG |    11232350.     35804.       314. |    53175030.    162430.       327. |   41942680.       373.4
FUEL COMB  |          0.         0.         0. |          0.         0.         0. |          0.         0.0
SOLV PURCH |          0.         0.         0. |          0.         0.         0. |          0.         0.0
MISC       |      602946.      7011.        86. |     1339271.     11768.       114. |     736325.       122.1
----------------------------------------------------------------------------------------------------------
           |    32022360.    155510.       206. |    83173940.    312092.       267. |   51151580.       159.7
```

```
Results of Emission Projection for Region  43
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:00 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                    Base Year = 1980                    |                  Proj Year = 1985                    |
ID         |  Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      1672     1672         0         0     1672   0.0 |      1723     1593         0         0     1593   7.6 |    -4.8
FUEL COMB  |       194      194         0         0      194   0.0 |       222      222         0         0      222   0.0 |    14.6
SOLV PURCH |      6538     6538         0         0     6538   0.0 |      8983     8983         0         0     8983   0.0 |    37.4
MISC       |      1162     1162         0         0     1162   0.0 |      1287     1287         0         0     1287   0.0 |    10.7
--------------------------------------------------------------------------------------------------------------------------
           |      9566     9566         0         0     9566   0.0 |     12216    12085         0         0    12085   1.1 |    26.3
```

```
Results of Cost Analysis for Region 43
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:00 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980          |           Proj Year = 1985          |
ID         |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM  |          0.         0.         0. |      -16316.       131.         0. |     -16316.         0.0
FUEL COMB  |          0.         0.         0. |          0.         0.         0. |          0.         0.0
SOLV PURCH |          0.         0.         0. |          0.         0.         0. |          0.         0.0
MISC       |          0.         0.         0. |          0.         0.         0. |          0.         0.0
----------------------------------------------------------------------------------------------------------
           |          0.         0.         0. |      -16316.       131.         0. |     -16316.         0.0
```

```
Results of Emission Projection for Region  44
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:00 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                    Base Year = 1980                     |                    Proj Year = 1985                     |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0    18214     8070     8070  55.7 |        0        0    23950     4487     4487  81.3 |  -44.4
CHEM MFG   |        0        0   864272    60147    60147  93.0 |        0        0   932462    45123    45123  95.2 |  -25.0
SURF COATG |        0        0   100250    60459    60459  39.7 |        0        0   137005    48689    48689  64.5 |  -19.5
FUEL COMB  |        0        0    17364    17364    17364   0.0 |        0        0    19496    19496    19496   0.0 |   12.3
SOLV PURCH |        0        0    87525    87525    87525   0.0 |        0        0   109962   109962   109962   0.0 |   25.6
MISC       |        0        0    85849    11801    11801  86.3 |        0        0    93459    10086    10086  89.2 |  -14.5
-----------------------------------------------------------------------------------------------------------------------------
           |        0        0  1173474   245366   245366  79.1 |        0        0  1316334   237843   237843  81.9 |   -3.1
```

```
Results of Cost Analysis for Region 44
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:00 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat    |            Base Year = 1980          |             Proj Year = 1985           |
ID         |        Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM  |   23363040.      10144.      2303. |    63826730.      19463.      3279. |    40463680.      173.2
CHEM MFG   |   17911160.     804125.        22. |    20085010.     887339.        23. |     2173858.       12.1
SURF COATG |   22261760.      39791.       559. |    41508630.      88316.       470. |    19246870.       86.5
FUEL COMB  |          0.          0.         0. |           0.          0.         0. |           0.        0.0
SOLV PURCH |          0.          0.         0. |           0.          0.         0. |           0.        0.0
MISC       |    6529968.      74048.        88. |     7836158.      83374.        94. |     1306190.       20.0
-----------------------------------------------------------------------------------------------------------
           |   70065930.     928108.        75. |   133256500.    1078491.       124. |    63190600.       90.2
```

```
Results of Emission Projection for Region  45
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:00 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                    Base Year = 1980                     |                    Proj Year = 1985                     |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   938580   158438  1948311   151939   310377  89.2 |   994442   125574  2047628   127482   253056  91.7 |  -18.5
CHEM MFG   |  6636224   216664  2744492   119028   335692  96.4 |  7826796   279333  3240173    74263   353596  96.8 |    5.3
SURF COATG |    87575    85202    30085    29745   114947   2.3 |   123457   121325    42015    23218   144542  12.6 |   25.7
FUEL COMB  |   360485   320582   153735   153636   474218   7.8 |   323000   284028   134855   129882   413910   9.6 |  -12.7
SOLV PURCH |   146774   146774    75611    75611   222385   0.0 |   175673   175673    90498    90498   266172   0.0 |   19.7
MISC       |   126954   120659    10659     7652   128311   6.8 |   153249   144061    12297     8145   152205   8.1 |   18.6
-----------------------------------------------------------------------------------------------------------------------------
           |  8296592  1048319  4962893   537611  1585930  88.0 |  9596617  1129993  5567466   453489  1583482  89.6 |   -0.2
```

```
Results of Cost Analysis for Region 45
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:00 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat    |            Base Year = 1980          |             Proj Year = 1985           |
ID         |        Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM  |  922628700.    2576514.       358. |  1067483000.    2789014.       383. |   144854300.       15.7
CHEM MFG   | 4227248000.    9045024.       467. |  4746024000.   10713370.       443. |   518776100.       12.3
SURF COATG |    2824090.       2713.      1041. |     7431399.      20930.       355. |     4607309.      163.1
FUEL COMB  |          0.      40002.         0. |           0.      43945.         0. |           0.        0.0
SOLV PURCH |          0.          0.         0. |           0.          0.         0. |           0.        0.0
MISC       |    2387352.       9302.       257. |     3730856.      13340.       280. |     1343504.       56.3
-----------------------------------------------------------------------------------------------------------
           | 5155088000.   11673560.       442. |  5824669000.   13580600.       429. |   669580800.       13.0
```

```
Results of Emission Projection for Region  46
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:01 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                  |                 Proj Year = 1985                  |
ID          | Unc Attn Ctr Attn   Unc MA   Ctr MA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc MA   Ctr MA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    13374     9026        6        6     9032  32.5 |    12205     7823        5        5     7828  35.9 |  -13.3
CHEM MFG    |      246      246        0        0      246   0.0 |      238      238        0        0      238   0.0 |   -3.1
SURF COATG  |      170      170        0        0      170   0.0 |      219      219        0        0      219   0.0 |   28.9
FUEL COMB   |     6146     6146      818      323     6469   7.1 |     6141     6067      829      412     6479   7.0 |    0.2
SOLV PURCH  |    17210    17210      351      351    17561   0.0 |    23436    23436      478      478    23914   0.0 |   36.2
MISC        |      370      370        2        2      372   0.0 |      419      419        2        2      421   0.1 |   13.1
------------------------------------------------------------------------------------------------------------------------------
            |    37516    33168     1177      682    33850  12.5 |    42658    38202     1314      897    39099  11.1 |   15.5
```

```
Results of Cost Analysis for Region 46
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:01 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980            |         Proj Year = 1985           |
ID          |       Cost    Emis Red    Cost Eff |       Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |   9214092.      4348.      2119. |   8981880.      4382.      2050. |   -232212.       -2.5
CHEM MFG    |         0.         0.         0. |         0.         0.         0. |         0.        0.0
SURF COATG  |         0.         0.         0. |         0.         0.         0. |         0.        0.0
FUEL COMB   |         0.       495.         0. |         0.       491.         0. |         0.        0.0
SOLV PURCH  |         0.         0.         0. |         0.         0.         0. |         0.        0.0
MISC        |         0.         0.         0. |       110.         0.         0. |       110.        0.0
---------------------------------------------------------------------------------------------------------------
            |   9214092.      4843.      1903. |   8981990.      4874.      1843. |   -232102.       -2.5
```

```
Results of Emission Projection for Region  47
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:01 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                  |                 Proj Year = 1985                  |
ID          | Unc Attn Ctr Attn   Unc MA   Ctr MA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc MA   Ctr MA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0      536      384      384  28.4 |        0        0      620      133      133  78.5 |  -65.3
CHEM MFG    |        3        3       15       15       18   0.0 |        4        4       16       12       16  19.8 |  -11.4
SURF COATG  |     1697     1663     1154     1069     2732   4.2 |     1808     1732     1230      914     2646  12.9 |   -3.1
FUEL COMB   |       61       61       67       67      128   0.0 |       67       67       78       78      144   0.0 |   12.8
SOLV PURCH  |     4094     4094     4094     4094     8188   0.0 |     4988     4988     4988     4988     9976   0.0 |   21.8
MISC        |      324      324      398      398      722   0.0 |      380      380      484      484      865   0.0 |   19.7
------------------------------------------------------------------------------------------------------------------------------
            |     6179     6145     6264     6027    12172   2.2 |     7247     7170     7417     6610    13780   6.0 |   13.2
```

```
Results of Cost Analysis for Region 47
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:01 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980            |         Proj Year = 1985           |
ID          |       Cost    Emis Red    Cost Eff |       Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |    354312.       152.      2331. |    835846.       487.      1718. |    481534.      135.9
CHEM MFG    |         0.         0.         0. |        55.         4.        14. |        55.        0.0
SURF COATG  |    129710.       119.      1090. |    219809.       393.       560. |     90099.       69.5
FUEL COMB   |         0.         0.         0. |         0.         0.         0. |         0.        0.0
SOLV PURCH  |         0.         0.         0. |         0.         0.         0. |         0.        0.0
MISC        |         0.         0.         0. |         0.         0.         0. |         0.        0.0
---------------------------------------------------------------------------------------------------------------
            |    484022.       271.      1786. |   1055710.       883.      1196. |    571688.      118.1
```

```
Results of Emission Projection for Region  48
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.0 - 6/23/87 - Time of Run: 10:01 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                      Proj Year = 1985                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   115631     8798     5704     1960    10758  91.1 |   114116     8383     6590     1373     9755  91.9 |    -9.3
CHEM MFG    |   426513    29475     1973     1973    31448  92.7 |   370080    30457     2338     1314    31771  91.5 |     1.0
SURF COATG  |    39019    32945     3054     3054    35999  14.4 |    50255    43106     3880     2029    45135  16.6 |    25.4
FUEL COMB   |     4710     4710      511      511     5221   0.0 |     4744     4744      514      514     5258   0.0 |     0.7
SOLV PURCH  |    72563    72563     8063     8063    80626   0.0 |    91688    91688    10188    10188   101877   0.0 |    26.4
MISC        |    20920    18953     2977     2977    21930   8.2 |    25688    23252     3766     2357    25610  13.0 |    16.8
-------------------------------------------------------------------------------------------------------------------------------
            |   679356   167444    22282    18538   185982  73.5 |   656571   201630    27277    17776   219406  67.9 |    18.0
```

```
Results of Cost Analysis for Region 48
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.0 - 6/23/87 - Time of Run: 10:01 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980              |            Proj Year = 1985              |
ID          |        Cost     Emis Red     Cost Eff  |          Cost    Emis Red      Cost Eff  |      Abs Chg     Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |   17607490.     110577.        159.    |     20837360.     110951.        188.   |    3229868.        18.3
CHEM MFG    |   -5517937.     397038.          0.    |     -4362149.     340647.          0.   |    1155789.         0.0
SURF COATG  |    1217473.       6074.        200.    |      1733875.       9000.        193.   |     516402.        42.4
FUEL COMB   |         0.          0.           0.    |           0.          0.          0.   |          0.         0.0
SOLV PURCH  |         0.          0.           0.    |           0.          0.          0.   |          0.         0.0
MISC        |     434838.       1967.        221.    |      1189507.       3844.        309.   |     754669.       173.6
-----------------------------------------------------------------------------------------------------------
            |   13741870.     515656.         27.    |     19398590.     464442.         42.   |    5656720.        41.2
```

```
Results of Emission Projection for Region  49
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.0 - 6/23/87 - Time of Run: 10:02 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                      Proj Year = 1985                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   141490    11641     8954     8596    20237  86.5 |   158014    11102     9422     5944    17046  89.8 |   -15.8
CHEM MFG    |    98597      509      398      349      858  99.1 |   138493      721      479      275      996  99.3 |    16.1
SURF COATG  |      642      642     3349     3327     3969   0.6 |      679      674     3705     2657     3331  24.0 |   -16.1
FUEL COMB   |     4983     4983     5221     4495     9478   7.1 |     4879     4545     5180     4764     9309   7.5 |    -1.8
SOLV PURCH  |    30571    30571    23063    23063    53634   0.0 |    35200    35200    26555    26555    61755   0.0 |    15.1
MISC        |    15336    11276     4716     4383    15659  21.9 |    16389    12758     5154     3435    16194  24.8 |     3.4
-------------------------------------------------------------------------------------------------------------------------------
            |   291619    59622    45701    44213   103835  69.2 |   353654    65000    50495    43630   108630  73.1 |     4.6
```

```
Results of Cost Analysis for Region 49
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.0 - 6/23/87 - Time of Run: 10:02 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980              |            Proj Year = 1985              |
ID          |        Cost     Emis Red     Cost Eff  |          Cost    Emis Red      Cost Eff  |      Abs Chg     Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |    -717160.     130207.          0.    |      -524724.     150390.          0.   |     192436.         0.0
CHEM MFG    |   -1457061.      98137.          0.    |     -1976332.     137976.          0.   |    -519271.         0.0
SURF COATG  |       4994.         22.        227.    |       260776.       1053.        248.   |     255782.      5121.8
FUEL COMB   |         0.        726.           0.    |           0.        750.          0.   |          0.         0.0
SOLV PURCH  |         0.          0.           0.    |           0.          0.          0.   |          0.         0.0
MISC        |     975246.       4393.        222.    |      1199001.       5349.        224.   |     223755.        22.9
-----------------------------------------------------------------------------------------------------------
            |   -1193981.     233485.          0.    |     -1041279.     295519.          0.   |     152702.         0.0
```

```
Results of Emission Projection for Region  50
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:02 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                 |                  Proj Year = 1985                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      112      112        0        0      112   0.0 |      111       97        0        0       97  12.2 |  -13.1
CHEM MFG    |    99269      556        0        0      556  99.4 |   119399      579        0        0      579  99.5 |    4.1
FUEL COMB   |    10152    10152        0        0    10152   0.0 |     7876     7876        0        0     7876   0.0 |  -22.4
SOLV PURCH  |    21768    21768        0        0    21768   0.0 |    22130    22130        0        0    22130   0.0 |    1.7
MISC        |    10786    10786        0        0    10786   0.0 |    10853    10853        0        0    10853   0.0 |    0.6
-----------------------------------------------------------------------------------------------------------------------------
            |   142087    43374        0        0    43374  69.5 |   160368    41534        0        0    41534  74.1 |   -4.2


Results of Cost Analysis for Region 50
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:02 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980              |        Proj Year = 1985              |
ID          |         Cost     Emis Red   Cost Eff |         Cost     Emis Red   Cost Eff |     Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |           0.           0.         0. |        3015.          14.       222. |       3015.         0.0
CHEM MFG    |     7277019.       98713.        74. |    10236420.      118820.        86. |    2959402.        40.7
FUEL COMB   |           0.           0.         0. |           0.           0.         0. |          0.         0.0
SOLV PURCH  |           0.           0.         0. |           0.           0.         0. |          0.         0.0
MISC        |           0.           0.         0. |           0.           0.         0. |          0.         0.0
-------------------------------------------------------------------------------------------------------------
            |     7277019.       98713.        74. |    10239440.      118834.        86. |    2962417.        40.7


Results of Emission Projection for Region  51
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:02 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                 |                  Proj Year = 1985                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    20474    12043    12043  41.2 |        0        0    21733     7670     7670  64.7 |  -36.3
CHEM MFG    |        0        0    10221     8659     8659  15.3 |        0        0    11868     6525     6525  45.0 |  -24.6
SURF COATG  |        0        0    68649    44623    44623  35.0 |        0        0    78561    34344    34344  56.3 |  -23.0
FUEL COMB   |        0        0     4906     4906     4906   0.0 |        0        0     4985     4985     4985   0.0 |    1.6
SOLV PURCH  |        0        0   115263   115263   115263   0.0 |        0        0   133492   133492   133492   0.0 |   15.8
MISC        |        0        0    14851     6931     6931  53.3 |        0        0    17409     7057     7057  59.5 |    1.8
-----------------------------------------------------------------------------------------------------------------------------
            |        0        0   234364   192425   192425  17.9 |        0        0   268047   194073   194073  27.6 |    0.9


Results of Cost Analysis for Region 51
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:02 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980              |        Proj Year = 1985              |
ID          |         Cost     Emis Red   Cost Eff |         Cost     Emis Red   Cost Eff |     Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |    18521100.        8431.      2197. |    44250080.       14063.      3147. |   25728970.       138.9
CHEM MFG    |      102568.        1562.        66. |      633357.        5343.       119. |     530789.       517.5
SURF COATG  |     7347002.       24026.       306. |    16318140.       44217.       369. |    8971139.       122.1
FUEL COMB   |           0.           0.         0. |           0.           0.         0. |          0.         0.0
SOLV PURCH  |           0.           0.         0. |           0.           0.         0. |          0.         0.0
MISC        |       87912.        7920.        11. |      242210.       10352.        23. |     154298.       175.5
-------------------------------------------------------------------------------------------------------------
            |    26058580.       41939.       621. |    61443780.       73974.       831. |   35385200.       135.8
```

```
Results of Emission Projection for Region  52
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:03 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                     |                    Proj Year = 1985                     |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    18750    16983        0         0    16983    9.4 |    12021    10793        0         0    10793   10.2 |  -36.4
CHEM MFG    |       10        0        0         0        0  100.0 |        7        0        0         0        0  100.0 |    0.0
FUEL COMB   |    12318    12318        0         0    12318    0.0 |     9903     9903        0         0     9903    0.0 |  -19.6
SOLV PURCH  |     1102     1102        0         0     1102    0.0 |     1175     1175        0         0     1175    0.0 |    6.6
MISC        |     1552     1552        0         0     1552    0.0 |     2053     2053        0         0     2053    0.0 |   32.3
-------------------------------------------------------------------------------------------------------------------------------
            |    33732    31955        0         0    31955    5.3 |    25158    23924        0         0    23924    4.9 |  -25.1
```

```
Results of Cost Analysis for Region 52
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:03 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980           |            Proj Year = 1985            |
ID          |          Cost     Emis Red   Cost Eff |          Cost    Emis Red    Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |      2483699.        1767.      1406. |      1754704.       1227.       1430. |    -728995.      -29.4
CHEM MFG    |         -150.          10.         0. |         -105.          7.          0. |         45.        0.0
FUEL COMB   |            0.           0.         0. |            0.          0.          0. |          0.        0.0
SOLV PURCH  |            0.           0.         0. |            0.          0.          0. |          0.        0.0
MISC        |            0.           0.         0. |            0.          0.          0. |          0.        0.0
---------------------------------------------------------------------------------------------------------------
            |      2483549.        1777.      1398. |      1754599.       1234.       1422. |    -728950.      -29.4
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:03 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                     |                    Proj Year = 1985                     |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826   850400  1269531   84.6 |  2385558   365390  6344020   611880   977270   88.8 |  -23.0
CHEM MFG    |  9029663   422308  6814311   668432  1090740   93.1 | 10470285   508951  7888866   478788   987739   94.6 |   -9.4
SURF COATG  |  1408711   394641  1728687  1210559  1605200   48.8 |  1774023   535842  2122349   910979  1446821   62.9 |   -9.9
FUEL COMB   |   649795   607706   442590   433741  1041447    4.7 |   595116   553593   421207   407581   961173    5.4 |   -7.7
SOLV PURCH  |  1355797  1355797  3240896  3240896  4596693    0.0 |  1636856  1636856  3841434  3841434  5478290    0.0 |   19.2
MISC        |   439043   281284   993342   342087   623371   56.5 |   497657   317939  1057843   298072   616010   60.4 |   -1.2
-------------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652  6746115 10226982   70.2 | 17359494  3918570 21675718  6548732 10467302   73.2 |    2.3
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:03 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980           |            Proj Year = 1985            |
ID          |          Cost     Emis Red   Cost Eff |          Cost    Emis Red    Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |   6192942000.     6988221.       886. |   9874741000.    7752308.      1274. |  3681800000.      59.5
CHEM MFG    |   4374478000.    14753230.       297. |   4951831000.   17371410.       285. |   577352700.      13.2
SURF COATG  |    352367600.     1532198.       230. |    628308200.    2449551.       256. |   275940600.      78.3
FUEL COMB   |            0.       50938.         0. |            0.      55150.         0. |           0.       0.0
SOLV PURCH  |            0.           0.         0. |            0.          0.          0. |           0.       0.0
MISC        |    214639400.      809014.       265. |    249939400.     939489.       266. |    35299970.      16.4
---------------------------------------------------------------------------------------------------------------
            |  11134430000.    24133600.       461. |  15704820000.   28567910.       550. |  4570392000.      41.0
```

```
Results of Emission Projection for Region  1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:03 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |              Base Year = 1980                  |              Proj Year = 1990                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    32766    25804    25804  21.2 |        0        0    34799    17071    17071  50.9 |   -33.8
CHEM MFG    |        0        0   432570    24913    24913  94.2 |        0        0   551008     9065     9065  98.4 |   -63.6
SURF COATG  |        0        0     2896     2050     2050  29.2 |        0        0     4362     1312     1312  69.9 |   -36.0
FUEL COMB   |        0        0    20614    20614    20614   0.0 |        0        0    23539    23539    23539   0.0 |    14.2
SOLV PURCH  |        0        0    80407    80407    80407   0.0 |        0        0   131583   131583   131583   0.0 |    63.6
MISC        |        0        0    23980    16441    16441  31.4 |        0        0    29392    12243    12243  58.3 |   -25.5
-----------------------------------------------------------------------------------------------------------------------------
            |        0        0   593233   170229   170229  71.3 |        0        0   774683   194812   194812  74.9 |    14.4
```

```
Results of Cost Analysis for Region 1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:03 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |           Proj Year = 1990            |
ID          |      Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |     Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   | 10315390.      6962.      1482. |   14328810.     17729.       808. |   4013423.       38.9
CHEM MFG    | -6094305.    407657.         0. |   -7535011.    541943.         0. |  -1440706.        0.0
SURF COATG  |   192042.       846.       227. |     709398.      3051.       233. |    517356.      269.4
FUEL COMB   |        0.         0.         0. |          0.         0.         0. |         0.        0.0
SOLV PURCH  |        0.         0.         0. |          0.         0.         0. |         0.        0.0
MISC        |  1770546.      7539.       235. |    3936241.     17149.       230. |   2165695.      122.3
-----------------------------------------------------------------------------------------------------------
            |  6183668.    423004.        15. |   11439440.    579871.        20. |   5255768.       85.0
```

```
Results of Emission Projection for Region  3
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:03 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |              Base Year = 1980                  |              Proj Year = 1990                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      925      640     3386      961     1601  62.9 |     1402      654     5408      268      922  86.5 |   -42.4
CHEM MFG    |     2931      494      791      790     1284  65.5 |     3493      590     1312      421     1011  79.0 |   -21.2
SURF COATG  |      645      645     2877     2877     3522   0.0 |     1226      998     5470     1060     2058  69.3 |   -41.6
FUEL COMB   |     3556     3556     5963     5963     9519   0.0 |     4987     4987     8170     8170    13157   0.0 |    38.2
SOLV PURCH  |     8473     8473    16447    16447    24920   0.0 |    16195    16195    31437    31437    47632  -0.0 |    91.1
MISC        |      140      140       84       84      224   0.0 |      189      189      137       69      259  20.8 |    15.5
-----------------------------------------------------------------------------------------------------------------------------
            |    16670    13948    29548    27122    41070  11.1 |    27493    23615    51935    41425    65040  18.1 |    58.4
```

```
Results of Cost Analysis for Region 3
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:03 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |           Proj Year = 1990            |
ID          |      Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |     Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |  4115109.      2710.      1518. |   13340020.      5888.      2266. |   9224909.      224.2
CHEM MFG    |   -36333.      2438.         0. |     131894.      3794.        35. |    168227.        0.0
SURF COATG  |        0.         0.         0. |    4085499.      4638.       881. |   4085499.        0.0
FUEL COMB   |        0.         0.         0. |          0.         0.         0. |         0.        0.0
SOLV PURCH  |        0.         0.         0. |          0.        -0.         0. |         0.        0.0
MISC        |        0.         0.         0. |      15100.        68.       222. |     15100.        0.0
-----------------------------------------------------------------------------------------------------------
            |  4078776.      5148.       792. |   17572510.     14388.      1221. |  13493730.      330.8
```

```
Results of Emission Projection for Region  4
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:04 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                   |                   Proj Year = 1990                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |    %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     8594     1488      300       37     1525   82.9 |     6422      842      335       67      909   86.6 |   -40.4
CHEM MFG    |    15716     7805    10350      153     7958   69.5 |    23708    10760    19576       67    10828   75.0 |    36.1
SURF COATG  |     1383     1383      130      130     1513    0.0 |     2403     2399      226       84     2482    5.6 |    64.1
FUEL COMB   |    11914    11914      229      229    12143    0.0 |    13500    13500      256      256    13756    0.0 |    13.3
SOLV PURCH  |    64229    64229     1311     1311    65540    0.0 |   106916   106916     2182     2182   109099    0.0 |    66.5
MISC        |     8071     1880        0        0     1880   76.7 |    14504     2597        0        0     2597   82.1 |    38.1
--------------------------------------------------------------------------------------------------------------------------------
            |   109907    88699    12320     1860    90559   25.9 |   167454   137014    22575     2656   139671   26.5 |    54.2


Results of Cost Analysis for Region 4
Radian/EPA Volatile Organi  Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:04 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980              |          Proj Year = 1990             |
ID          |        Cost    Emis Red     Cost Eff |         Cost    Emis Red     Cost Eff |       Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   |   16630290.       7369.        2257. |    12632270.       5848.        2160. |    -3998023.      -24.0
CHEM MFG    |    1081718.      18108.          60. |     1048761.      32456.          32. |      -32958.       -3.0
SURF COATG  |          0.          0.           0. |       31844.        147.         217. |       31844.        0.0
FUEL COMB   |          0.          0.           0. |           0.          0.           0. |           0.        0.0
SOLV PURCH  |          0.          0.           0. |           0.          0.           0. |           0.        0.0
MISC        |    1374402.       6191.         222. |     2643297.      11907.         222. |     1268895.       92.3
-----------------------------------------------------------------------------------------------------------------
            |   19086410.      31668.         603. |    16356170.      50358.         325. |    -2730242.      -14.3


Results of Emission Projection for Region  5
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:04 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                   |                   Proj Year = 1990                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |    %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   935714   196609   196609   79.0 |        0        0  1207273    90981    90981   92.5 |   -53.7
CHEM MFG    |        0        0    34451    23334    23334   32.3 |        0        0    53533    11298    11298   78.9 |   -51.6
SURF COATG  |        0        0   191901   127669   127669   33.5 |        0        0   308519    74609    74609   75.8 |   -41.6
FUEL COMB   |        0        0    48125    46406    46406    3.6 |        0        0    60728    58245    58245    4.1 |    25.5
SOLV PURCH  |        0        0   426532   426532   426532    0.0 |        0        0   720656   720656   720656    0.0 |    69.0
MISC        |        0        0   189824    27657    27657   85.4 |        0        0   255532    24135    24135   90.6 |   -12.7
--------------------------------------------------------------------------------------------------------------------------------
            |        0        0  1826547   848207   848207   53.6 |        0        0  2606241   979923   979923   62.4 |    15.5


Results of Cost Analysis for Region 5
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:04 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980              |          Proj Year = 1990             |
ID          |        Cost    Emis Red     Cost Eff |         Cost    Emis Red     Cost Eff |       Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   |  639971300.     739105.         866. |  2008499000.    1116293.        1799. |  1368527000.      213.8
CHEM MFG    |    1505059.      11117.         135. |     4358281.      42235.         103. |     2853222.      189.6
SURF COATG  |   32424240.      64232.         505. |   114479200.     233911.         489. |    82054910.      253.1
FUEL COMB   |          0.       1719.           0. |           0.       2483.           0. |           0.        0.0
SOLV PURCH  |          0.          0.           0. |           0.          0.           0. |           0.        0.0
MISC        |   35980550.     162167.         222. |    52145500.     231397.         225. |    16164950.       44.9
-----------------------------------------------------------------------------------------------------------------
            |  709881200.     978340.         726. |  2179482000.    1626318.        1340. |  1469600000.      207.0
```

```
Results of Emission Projection for Region  6
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:04 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                  |                   Proj Year = 1990                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     2122     1778    12469     1962     3740   74.4 |     3026      780    16174     1353     2132   88.9 |  -43.0
CHEM MFG   |     5657     3414     3221     1521     4935   44.4 |    12516     8301     5020      609     8910   49.2 |   80.6
SURF COATG |      483      483     6997     6430     6913    7.6 |      620      567     8977     4133     4700   51.0 |  -32.0
FUEL COMB  |     4200     3583     3829     3658     7241    9.8 |     5540     4719     4923     4324     9042   13.6 |   24.9
SOLV PURCH |    16741    16741    19652    19652    36393    0.0 |    30293    30293    35561    35561    65854    0.0 |   81.0
MISC       |     3870     2963      999      999     3962   18.6 |     5784     4765     1545      816     5581   23.8 |   40.9
-----------------------------------------------------------------------------------------------------------------------------
           |    33073    28962    47167    34222    63184   21.3 |    57780    49424    72200    46795    96220   26.0 |   52.3
```

```
Results of Cost Analysis for Region 6
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:04 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980             |          Proj Year = 1990             |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |     9759443.     10851.       899. |    30064980.     17068.      1761. |    20305540.      208.1
CHEM MFG   |      493911.      3943.       125. |     1328655.      8626.       154. |      834744.      169.0
SURF COATG |      128709.       567.       227. |     1347063.      4897.       275. |     1218354.      946.6
FUEL COMB  |           0.       788.         0. |           0.      1421.         0. |           0.        0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC       |      438954.       907.       484. |      845041.      1747.       484. |      406087.       92.5
-------------------------------------------------------------------------------------------------------------
           |    10821020.     17056.       634. |    33585740.     33760.       995. |    22764720.      210.4
```

```
Results of Emission Projection for Region  7
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:05 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                  |                   Proj Year = 1990                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0     3047      995      995   67.3 |        0        0     4177      164      164   96.1 |  -83.5
CHEM MFG   |        0        0    11761     3327     3327   71.7 |        0        0    19882     1224     1224   93.8 |  -63.2
SURF COATG |        0        0    53122    36053    36053   32.1 |        0        0    74939    15388    15388   79.5 |  -57.3
FUEL COMB  |        0        0      565      565      565    0.0 |        0        0      788      788      788    0.0 |   39.4
SOLV PURCH |        0        0   100324   100324   100324    0.0 |        0        0   150602   150602   150602    0.0 |   50.1
MISC       |        0        0     4256     3046     3046   28.4 |        0        0     4707     1799     1799   61.8 |  -40.9
-----------------------------------------------------------------------------------------------------------------------------
           |        0        0   173075   144310   144310   16.6 |        0        0   255095   169965   169965   33.4 |   17.8
```

```
Results of Cost Analysis for Region 7
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:05 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980             |          Proj Year = 1990             |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |      983585.      2052.       479. |     2114688.      4013.       527. |     1131103.      115.0
CHEM MFG   |     1388580.      8434.       165. |     3417459.     18659.       183. |     2028879.      146.1
SURF COATG |     4706528.     17069.       276. |    13164160.     59551.       221. |     8457632.      179.7
FUEL COMB  |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC       |      119596.      1210.        99. |      354775.      2908.       122. |      235179.      196.6
-------------------------------------------------------------------------------------------------------------
           |     7190289.     28765.       250. |    19051080.     85131.       224. |    11852790.      164.7
```

```
Results of Emission Projection for Region  8
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:05 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                       |                  Proj Year = 1990                      |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      192       40    14942      7000     7040   53.5 |      233       34    16945      4258     4292   75.0 |  -39.0
CHEM MFG    |     8825      809   312904      4190     4999   98.4 |    10072      929   410528      1688     2616   99.4 |  -47.7
SURF COATG  |        0        0    47712     12965    12965   72.8 |        0        0    77796      7728     7728   90.1 |  -40.4
FUEL COMB   |       57       57      176       176      233    0.0 |       72       72      234       234      306    0.0 |   31.4
SOLV PURCH  |      517      517    12402     12402    12919    0.0 |      793      793    19012     19012    19805    0.0 |   53.3
MISC        |      112      112    75436       342      454   99.4 |      120      120   101721       174      294   99.7 |  -35.2
--------------------------------------------------------------------------------------------------------------------------------
            |     9703     1535   463572     37075    38610   91.8 |    11289     1947   626237     33094    35041   94.5 |   -9.2
```

```
Results of Cost Analysis for Region 8
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:05 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |          Proj Year = 1990             |
ID          |       Cost     Emis Red    Cost Eff |         Cost     Emis Red    Cost Eff |       Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------
PETROLEUM   |   18867110.       8094.       2331. |    47139480.      12886.       3658. |    28272370.       149.8
CHEM MFG    |   -4129055.     316730.          0. |    -3278537.     417984.          0. |      850518.         0.0
SURF COATG  |    7887569.      34747.        227. |    15901110.      70068.        227. |     8013541.       101.6
FUEL COMB   |          0.          0.          0. |           0.          0.          0. |           0.         0.0
SOLV PURCH  |          0.          0.          0. |           0.          0.          0. |           0.         0.0
MISC        |   10776760.      75094.        144. |    14499810.     101547.        143. |     3723046.        34.5
----------------------------------------------------------------------------------------------------------------
            |   33402390.     434665.         77. |    74261860.     602485.        123. |    40859470.       122.3
```

```
Results of Emission Projection for Region  9
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:05 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                       |                  Proj Year = 1990                      |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0      210        21       21   90.0 |        0        0      212        14       14   93.6 |  -35.3
SURF COATG  |        0        0      171       150      150   12.3 |        0        0      224        87       87   60.9 |  -41.7
FUEL COMB   |        0        0       37        37       37    0.0 |        0        0       43        43       43    0.0 |   17.1
SOLV PURCH  |        0        0     5182      5182     5182    0.0 |        0        0     7493      7493     7493    0.0 |   44.6
MISC        |        0        0      758       758      758    0.0 |        0        0     1038       495      495   52.3 |  -34.7
--------------------------------------------------------------------------------------------------------------------------------
            |        0        0     6358      6148     6148    3.3 |        0        0     9010      8133     8133    9.7 |   32.3
```

```
Results of Cost Analysis for Region 9
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:05 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |          Proj Year = 1990             |
ID          |       Cost     Emis Red    Cost Eff |         Cost     Emis Red    Cost Eff |       Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------
PETROLEUM   |      69552.        189.        368. |       72895.        198.        368. |        3343.         4.8
SURF COATG  |       7398.         21.        352. |       64720.        136.        475. |       57322.       774.8
FUEL COMB   |          0.          0.          0. |           0.          0.          0. |           0.         0.0
SOLV PURCH  |          0.          0.          0. |           0.          0.          0. |           0.         0.0
MISC        |          0.          0.          0. |      120586.        543.        222. |      120586.         0.0
----------------------------------------------------------------------------------------------------------------
            |      76950.        210.        366. |      258200.        877.        294. |      181250.       235.5
```

```
Results of Emission Projection for Region  10
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:05 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                    |                 Proj Year = 1990                    |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     1274     1103     5211     4679     5782  10.8 |     1724     1375     7048      812     2188  75.1 |  -62.2
CHEM MFG   |        0        0     3032     3030     3030   0.1 |        0        0     4938     1447     1447  70.7 |  -52.3
SURF COATG |      908      908     8633     7931     8839   7.4 |     1395     1256    13202     5180     6436  55.9 |  -27.2
FUEL COMB  |     2661     2661     1036     1036     3697   0.0 |     3521     3521     1386     1386     4907   0.0 |   32.7
SOLV PURCH |    24556    24556    87063    87063   111619   0.0 |    45919    45919   162805   162805   208724   0.0 |   87.0
MISC       |        0        0     1204      135      135  88.8 |        0        0     1948      185      185  90.5 |   37.2
-----------------------------------------------------------------------------------------------------------------------------
           |    29399    29228   106179   103874   133102   1.8 |    52558    52071   191328   171815   223886   8.2 |   68.2
```

```
Results of Cost Analysis for Region 10
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:05 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------
Ind Cat    |         Base Year = 1980         |         Proj Year = 1990         |
ID         |        Cost  Emis Red  Cost Eff |        Cost  Emis Red  Cost Eff |     Abs Chg  Prct Chg
------------------------------------------------------------------------------------------------------
PETROLEUM  |    1638693.      703.     2331. |    4379750.     6584.      665. |    2741057.     167.3
CHEM MFG   |        -30.        2.        0. |     774211.     3491.      222. |     774241.       0.0
SURF COATG |     159354.      702.      227. |    1837433.     8161.      225. |    1678079.    1053.1
FUEL COMB  |          0.        0.        0. |          0.        0.        0. |          0.       0.0
SOLV PURCH |          0.        0.        0. |          0.        0.        0. |          0.       0.0
MISC       |     194214.     1069.      182. |     328789.     1763.      187. |     134575.      69.3
------------------------------------------------------------------------------------------------------
           |    1992231.     2476.      805. |    7320184.    20000.      366. |    5327953.     267.4
```

```
Results of Emission Projection for Region  11
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:06 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                    |                 Proj Year = 1990                    |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0    20368     3222     3222  84.2 |        0        0    24904     1302     1302  94.8 |  -59.6
CHEM MFG   |        0        0     5541     1505     1505  72.8 |        0        0     8449      669      669  92.1 |  -55.5
SURF COATG |        0        0    15742    15588    15588   1.0 |        0        0    26909    10069    10069  62.6 |  -35.4
FUEL COMB  |        0        0     9449     9449     9449   0.0 |        0        0    12711    12711    12711   0.0 |   34.5
SOLV PURCH |        0        0   121011   121011   121011   0.0 |        0        0   194685   194685   194685   0.0 |   60.9
MISC       |        0        0    15388     1507     1507  90.2 |        0        0    18966     1165     1165  93.9 |  -22.7
-----------------------------------------------------------------------------------------------------------------------------
           |        0        0   187499   152282   152282  18.8 |        0        0   286624   220601   220601  23.0 |   44.9
```

```
Results of Cost Analysis for Region 11
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87   Time of Run: 10:06 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------
Ind Cat    |         Base Year = 1980         |         Proj Year = 1990         |
ID         |        Cost  Emis Red  Cost Eff |        Cost  Emis Red  Cost Eff |     Abs Chg  Prct Chg
------------------------------------------------------------------------------------------------------
PETROLEUM  |   10091110.    17146.      589. |   34610760.    23602.     1466. |   24519650.     243.0
CHEM MFG   |     490829.     4036.      122. |    1722542.     7780.      221. |    1231713.     250.9
SURF COATG |      34958.      154.      227. |    3822638.    16840.      227. |    3787680.   10834.9
FUEL COMB  |          0.        0.        0. |          0.        0.        0. |          0.       0.0
SOLV PURCH |          0.        0.        0. |          0.        0.        0. |          0.       0.0
MISC       |    3023910.    13881.      218. |    3863898.    17800.      217. |     839988.      27.8
------------------------------------------------------------------------------------------------------
           |   13640810.    35217.      387. |   44019840.    66022.      667. |   30379030.     222.7
```

```
Results of Emission Projection for Region  13
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:06 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                      |                  Proj Year = 1990                     |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      599      599         0         0      599    0.0 |      688      467         0         0      467   32.2 |  -22.1
CHEM MFG    |      236      236         0         0      236    0.0 |      424      424         0         0      424    0.0 |   79.5
FUEL COMB   |     1551     1551         0         0     1551    0.0 |     1975     1975         0         0     1975    0.0 |   27.3
SOLV PURCH  |    12392    12392         0         0    12392    0.0 |    20523    20523         0         0    20523    0.0 |   65.6
MISC        |     3000     3000         0         0     3000    0.0 |     3815     3815         0         0     3815    0.0 |   27.2
-------------------------------------------------------------------------------------------------------------------------------
            |    17778    17778         0         0    17778    0.0 |    27424    27203         0         0    27203    0.8 |   53.0
```

```
Results of Cost Analysis for Region 13
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:06 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |            Proj Year = 1990            |
ID          |        Cost     Emis Red    Cost Eff |          Cost     Emis Red    Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |          0.          0.          0.  |       -31488.        221.          0.  |     -31488.        0.0
CHEM MFG    |          0.          0.          0.  |           0.          0.          0.  |          0.        0.0
FUEL COMB   |          0.          0.          0.  |           0.          0.          0.  |          0.        0.0
SOLV PURCH  |          0.          0.          0.  |           0.          0.          0.  |          0.        0.0
MISC        |          0.          0.          0.  |           0.          0.          0.  |          0.        0.0
--------------------------------------------------------------------------------------------------------------
            |          0.          0.          0.  |       -31488.        221.          0.  |     -31488.        0.0
```

```
Results of Emission Projection for Region  14
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:06 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                      |                  Proj Year = 1990                     |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    224238     46435    46435   79.3 |        0        0    261584     16857    16857   93.6 |  -63.7
CHEM MFG    |        0        0     52015     13660    13660   73.7 |        0        0     72753      7016     7016   90.4 |  -48.6
SURF COATG  |        0        0    180144    132027   132027   26.7 |        0        0    232939     71684    71684   69.2 |  -45.7
FUEL COMB   |        0        0      6899      6899     6899    0.0 |        0        0      7135      7135     7135    0.0 |    3.4
SOLV PURCH  |        0        0    246769    246769   246769    0.0 |        0        0    320461    320461   320461    0.0 |   29.9
MISC        |        0        0     48734      9809     9809   79.9 |        0        0     44292      4856     4856   89.0 |  -50.5
-------------------------------------------------------------------------------------------------------------------------------
            |        0        0    758799    455599   455599   40.0 |        0        0    939164    428009   428009   54.4 |   -6.1
```

```
Results of Cost Analysis for Region 14
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:06 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |            Proj Year = 1990            |
ID          |        Cost     Emis Red    Cost Eff |          Cost     Emis Red    Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |  384486600.     177803.       2162.  |    987978200.     244727.       4037.  |  603491600.      157.0
CHEM MFG    |    5529080.      38355.        144.  |     13911470.      65737.        212.  |    8382392.      151.6
SURF COATG  |    8659682.      48117.        180.  |     44813560.     161255.        278.  |   36153880.      417.5
FUEL COMB   |          0.          0.          0.  |           0.          0.          0.  |          0.        0.0
SOLV PURCH  |          0.          0.          0.  |           0.          0.          0.  |          0.        0.0
MISC        |    8638698.      38925.        222.  |      8726441.      39436.        221.  |      87743.        1.0
--------------------------------------------------------------------------------------------------------------
            |  407314000.     303200.       1343.  |   1055430000.     511155.       2065.  |  648115700.      159.1
```

```
Results of Emission Projection for Region  15
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:07 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                  |                   Proj Year = 1990                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   156517    11491     3781     2322    13813  91.4 |   173989    10762     4173      662    11424  93.6 |  -17.3
CHEM MFG   |   267841    12558   718440     7996    20554  97.9 |   344442    15599   933859     4524    20123  98.4 |   -2.1
SURF COATG |   232564    51084     7519     4378    55462  76.9 |   326985    71025    10366     1803    72828  78.4 |   31.3
FUEL COMB  |    10890    10866      308      308    11174   0.2 |    11983    11948      408      407    12355   0.3 |   10.6
SOLV PURCH |   152202   152202    20755    20755   172957   0.0 |   228096   228096    31104    31104   259201   0.0 |   49.9
MISC       |    29461    16165      561      280    16445  45.2 |    39909     9322      733      126     9448  76.8 |  -42.5
-------------------------------------------------------------------------------------------------------------------------------
           |   849475   254366   751364    36039   290405  81.9 |  1125404   346752   980644    38627   385378  81.7 |   32.7
```

```
Results of Cost Analysis for Region 15
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:07 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |         Proj Year = 1990             |
ID         |        Cost    Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |        Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   89383120.    146485.       610. |   106105200.    166738.       636. |      16722060.       18.7
CHEM MFG   |  -46995860.    965727.         0. |   -56520700.   1258178.         0. |      -9524832.        0.0
SURF COATG |   41104740.    184621.       223. |    64858900.    264524.       245. |      23754160.       57.8
FUEL COMB  |          0.        24.         0. |           0.        36.         0. |             0.        0.0
SOLV PURCH |          0.         0.         0. |           0.         0.         0. |             0.        0.0
MISC       |    3012096.     13577.       222. |     6922576.     31194.       222. |       3910480.      129.8
------------------------------------------------------------------------------------------------------------------
           |   86504100.   1310434.        66. |   121366000.   1720669.        71. |      34861860.       40.3
```

```
Results of Emission Projection for Region  16
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:07 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                  |                   Proj Year = 1990                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      111      111        0        0      111   0.0 |      116       79        0        0       79  31.6 |  -28.5
CHEM MFG   |   108754    24323        0        0    24323  77.6 |   168152    33257        0        0    33257  80.2 |   36.7
SURF COATG |     3661     3549        0        0     3549   3.1 |     4767     4098        0        0     4098  14.0 |   15.5
FUEL COMB  |     5475     5475        0        0     5475   0.0 |     5461     5461        0        0     5461   0.0 |   -0.2
SOLV PURCH |    68776    68776        0        0    68776   0.0 |    91209    91209        0        0    91209   0.0 |   32.6
MISC       |      788      738        0        0      738   6.3 |      900      829        0        0      829   7.9 |   12.4
-------------------------------------------------------------------------------------------------------------------------------
           |   187565   102972        0        0   102972  45.1 |   270605   134934        0        0   134934  50.1 |   31.0
```

```
Results of Cost Analysis for Region 16
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:07 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |         Proj Year = 1990             |
ID         |        Cost    Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |        Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------------
PETROLEUM  |          0.         0.         0. |        8210.        37.       224. |          8210.        0.0
CHEM MFG   |   -1048219.     84431.         0. |    -1568899.    134895.         0. |       -520680.        0.0
SURF COATG |      25424.       112.       227. |       67063.       668.       100. |         41639.      163.8
FUEL COMB  |          0.         0.         0. |           0.         0.         0. |             0.        0.0
SOLV PURCH |          0.         0.         0. |           0.         0.         0. |             0.        0.0
MISC       |      11364.        50.       227. |       15988.        71.       226. |          4624.       40.7
------------------------------------------------------------------------------------------------------------------
           |   -1011431.     84593.         0. |    -1477638.    135671.         0. |       -466207.        0.0
```

```
Results of Emission Projection for Region  17
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:08 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                      |                   Proj Year = 1990                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   216620    22611     8215     4282    26893  88.0 |   266188    22664     9746     1492    24156  91.2 |   -10.2
CHEM MFG    |     3745     3745       43       43     3788   0.0 |     5732     5703       59       24     5726   1.1 |    51.2
SURF COATG  |     2651     2651     2743     2743     5394   0.0 |     3783     3342     3907     1777     5119  33.4 |    -5.1
FUEL COMB   |    79920    79920     4659     4659    84579   0.0 |    81234    81234     4643     4643    85876   0.0 |     1.5
SOLV PURCH  |    35310    35310     4364     4364    39674   0.0 |    53146    53146     6568     6568    59714   0.0 |    50.5
MISC        |      328      328     1472     1472     1800   0.0 |      419      419     2033     1903     2322   5.3 |    29.0
------------------------------------------------------------------------------------------------------------------------------
            |   338574   144565    21496    17563   162128  55.0 |   410501   166507    26957    16407   182914  58.2 |    12.8
```

```
Results of Cost Analysis for Region 17
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:08 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 1990           |
ID          |       Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |  461402800.    197942.      2331. |  571879600.    251778.      2271. |  110476800.       23.9
CHEM MFG    |          0.         0.         0. |      82135.        65.      1270. |      82135.        0.0
SURF COATG  |          0.         0.         0. |     577553.      2571.       225. |     577553.        0.0
FUEL COMB   |          0.         0.         0. |          0.         0.         0. |          0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |          0.        0.0
MISC        |          0.         0.         0. |      28813.       130.       222. |      28813.        0.0
-------------------------------------------------------------------------------------------------------------
            |  461402800.    197942.      2331. |  572568100.    254544.      2249. |  111165200.       24.1
```

```
Results of Emission Projection for Region  18
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:08 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                      |                   Proj Year = 1990                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1906      573    41135    20019    20592  52.2 |     2429      461    52161     9120     9582  82.4 |   -53.5
CHEM MFG    |     7839     4842   157562    69345    74187  55.1 |     9549     7728   234064    34718    42446  82.6 |   -42.8
SURF COATG  |     1776     1662    40529    18404    20066  52.6 |     2625     1155    59634    10426    11581  81.4 |   -42.3
FUEL COMB   |     1822      367     5630     5232     5599  24.9 |     2539      793     6225     5273     6066  30.8 |     8.3
SOLV PURCH  |     3533     3533    46945    46945    50478   0.0 |     5318     5318    70664    70664    75982   0.0 |    50.5
MISC        |     2512     1057    19668     6969     8026  63.8 |     3513      940    27165     7426     8366  72.7 |     4.2
------------------------------------------------------------------------------------------------------------------------------
            |    19388    12034   311469   166914   178948  45.9 |    25973    16396   449914   137627   154023  67.6 |   -13.9
```

```
Results of Cost Analysis for Region 18
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:08 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 1990           |
ID          |       Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |   45137620.     22449.      2011. |  119918400.     45009.      2664. |   74780780.      165.7
CHEM MFG    |    3465031.     91214.        38. |   25234300.    201167.       125. |   21769270.      628.3
SURF COATG  |    3892722.     22239.       175. |   13866510.     50677.       274. |    9973789.      256.2
FUEL COMB   |          0.      1853.         0. |          0.      2698.         0. |          0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |          0.        0.0
MISC        |    3150084.     14154.       223. |    5112424.     22313.       229. |    1962340.       62.3
-------------------------------------------------------------------------------------------------------------
            |   55645460.    151909.       366. |  164131600.    321864.       510. |  108486200.      195.0
```

```
Results of Emission Projection for Region  19
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:08 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                 Proj Year = 1990                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0   700999   103958   103958  85.2 |        0        0   949568    38952    38952  95.9 |  -62.5
CHEM MFG   |        0        0   955331   176474   176474  81.5 |        0        0  1774111    84315    84315  95.2 |  -52.2
SURF COATG |        0        0    12269    10850    10850  11.6 |        0        0    15961     7081     7081  55.6 |  -34.7
FUEL COMB  |        0        0    36288    31269    31269  13.8 |        0        0    36863    32245    32245  12.5 |    3.1
SOLV PURCH |        0        0    39957    39957    39957   0.0 |        0        0    54635    54635    54635   0.0 |   36.7
MISC       |        0        0    10728    10212    10212   4.8 |        0        0    13928     6341     6341  54.5 |  -37.9
------------------------------------------------------------------------------------------------------------------------
           |        0        0  1755572   372720   372720  78.8 |        0        0  2845065   223570   223570  92.1 |  -40.0
```

```
Results of Cost Analysis for Region 19
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:08 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |            Proj Year = 1990            |
ID         |        Cost    Emis Red     Cost Eff |          Cost    Emis Red     Cost Eff |       Abs Chg     Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  | 1214326000.     597041.        2034. |   3612966000.     910616.        3968. |   2398640000.       197.5
CHEM MFG   |   71472330.     778857.          92. |    144444400.    1689796.          85. |     72972120.       102.1
SURF COATG |     322113.       1419.         227. |      2015595.       8879.         227. |      1693482.       525.7
FUEL COMB  |          0.       5019.           0. |            0.       4618.           0. |            0.         0.0
SOLV PURCH |          0.          0.           0. |            0.          0.           0. |            0.         0.0
MISC       |      95238.        516.         185. |      1659866.       7587.         219. |      1564628.      1642.9
-------------------------------------------------------------------------------------------------------------
           | 1286216000.    1382852.         930. |   3761086000.    2621496.        1435. |   2474870000.       192.4
```

```
Results of Emission Projection for Region  20
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:09 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                 Proj Year = 1990                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     5828     5600     6133     6133    11733   1.9 |     8114     5328     8402     1840     7168  56.6 |  -38.9
CHEM MFG   |        0        0     2702     2702     2702   0.0 |        0        0     4543     1351     1351  70.3 |  -50.0
SURF COATG |      177      177     6900     3630     3807  46.2 |      246      127     9672     2377     2504  74.8 |  -34.2
FUEL COMB  |      573      573      667      667     1240   0.0 |      814      814      967      967     1781   0.0 |   43.6
SOLV PURCH |     7463     7463    13860    13860    21323   0.0 |    11889    11889    22080    22080    33968   0.0 |   59.3
MISC       |      648      648      194      191      839   0.4 |      855      855      315      118      973  16.8 |   16.0
------------------------------------------------------------------------------------------------------------------------
           |    14689    14461    30456    27183    41644   7.8 |    21918    19012    45979    28734    47746  29.7 |   14.7
```

```
Results of Cost Analysis for Region 20
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:09 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |            Proj Year = 1990            |
ID         |        Cost    Emis Red     Cost Eff |          Cost    Emis Red     Cost Eff |       Abs Chg     Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |     531468.        228.        2331. |      2115423.       9348.         226. |      1583955.       298.0
CHEM MFG   |          0.          0.           0. |       779237.       3191.         244. |       779237.         0.0
SURF COATG |     742290.       3270.         227. |      1962512.       7414.         265. |      1220222.       164.4
FUEL COMB  |          0.          0.           0. |            0.          0.           0. |            0.         0.0
SOLV PURCH |          0.          0.           0. |            0.          0.           0. |            0.         0.0
MISC       |        258.          3.          86. |        41348.        197.         210. |        41090.     15926.3
-------------------------------------------------------------------------------------------------------------
           |    1274016.       3501.         364. |      4898519.      20151.         243. |      3624503.       284.5
```

```
Results of Emission Projection for Region  21
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:09 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                     |                  Proj Year = 1990                      |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr     LOC  | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr     LOC  |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   266372    32364        0         0    32364   87.9 |   342747    26447        0         0    26447   92.3 |  -18.3
CHEM MFG    |    69931     3582        0         0     3582   94.9 |    88393     4882        0         0     4882   94.5 |   36.3
SURF COATG  |    22226    19548       85        85    19633   12.0 |    26589    21037      101        39    21076   21.0 |    7.3
FUEL COMB   |     2559     2559       24        24     2583    0.0 |     2847     2847       27        27     2874    0.0 |   11.3
SOLV PURCH  |    64450    64450      641       641    65091    0.0 |    88557    88557      881       881    89437    0.0 |   37.4
MISC        |    64555    18928     1454       257    19185   70.9 |    78680    19011     1410       201    19212   76.0 |    0.1
------------------------------------------------------------------------------------------------------------------------------
            |   490093   141431     2204      1007   142438   71.1 |   627813   162780     2419      1147   163928   74.0 |   15.1
```

```
Results of Cost Analysis for Region 21
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:09 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |            Proj Year = 1990            |
ID          |         Cost     Emis Red   Cost Eff |          Cost     Emis Red   Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |     5568460.     234008.        24. |     10437610.     316300.        33. |     4869154.        87.4
CHEM MFG    |   116262600.      66349.      1752. |    148817300.      83510.      1782. |    32554670.        28.0
SURF COATG  |     1356315.       2678.       506. |      3839318.       5615.       684. |     2483003.       183.1
FUEL COMB   |           0.         0.         0. |            0.         0.         0. |           0.         0.0
SOLV PURCH  |           0.         0.         0. |            0.         0.         0. |           0.         0.0
MISC        |     9935896.      46824.       212. |     13068940.      60879.       215. |     3133041.        31.5
--------------------------------------------------------------------------------------------------------------
            |   133123300.     349859.       381. |    176163100.     466304.       378. |    43039870.        32.3
```

```
Results of Emission Projection for Region  22
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:09 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                     |                  Proj Year = 1990                      |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr     LOC  | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr     LOC  |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    13399     10197    10197   23.9 |        0        0    16383      1781     1781   89.1 |  -82.5
CHEM MFG    |        0        0     8511      8498     8498    0.2 |        0        0    10352      4238     4238   59.1 |  -50.1
SURF COATG  |        0        0    43410     42534    42534    2.0 |        0        0    50723     24576    24576   51.5 |  -42.2
FUEL COMB   |        0        0    30471     30471    30471    0.0 |        0        0    38021     38021    38021    0.0 |   24.8
SOLV PURCH  |        0        0   160850    160850   160850    0.0 |        0        0   256576    256576   256576    0.0 |   59.5
MISC        |        0        0    14104     14078    14078    0.2 |        0        0    19245      8596     8596   55.3 |  -38.9
------------------------------------------------------------------------------------------------------------------------------
            |        0        0   270745    266628   266628    1.5 |        0        0   391300    333788   333788   14.7 |   25.2
```

```
Results of Cost Analysis for Region 22
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:09 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |            Proj Year = 1990            |
ID          |         Cost     Emis Red   Cost Eff |          Cost     Emis Red   Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |     3317382.       3202.      1036. |      8478300.      14602.       581. |     5160918.       155.6
CHEM MFG    |        2886.         13.       222. |      5146599.       6114.       842. |     5143713.    178229.8
SURF COATG  |     -218889.        876.         0. |     15769360.      26147.       603. |    15988250.         0.0
FUEL COMB   |           0.         0.         0. |            0.         0.         0. |           0.         0.0
SOLV PURCH  |           0.         0.         0. |            0.         0.         0. |           0.         0.0
MISC        |        4446.         26.       171. |      3668831.      10649.       345. |     3664385.     82419.8
--------------------------------------------------------------------------------------------------------------
            |     3105825.       4117.       754. |     33063090.      57513.       575. |    29957270.       964.6
```

```
Results of Emission Projection for Region  23
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:10 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 1990                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   394595    34773    34773  91.2 |        0        0   484838    18852    18852  96.1 |  -45.8
CHEM MFG    |        0        0    34445    34384    34384   0.2 |        0        0    47526    16974    16974  64.3 |  -50.6
SURF COATG  |        0        0   145042   135825   135825   6.4 |        0        0   195999    83037    83037  57.6 |  -38.9
FUEL COMB   |        0        0    13960    13960    13960   0.0 |        0        0    14504    14504    14504   0.0 |    3.9
SOLV PURCH  |        0        0   261240   261240   261240   0.0 |        0        0   374775   374775   374775   0.0 |   43.5
MISC        |        0        0    36112    23412    23412  35.2 |        0        0    42463    18861    18861  55.6 |  -19.4
-------------------------------------------------------------------------------------------------------------------------
            |        0        0   885394   503594   503594  43.1 |        0        0  1160105   527004   527004  54.6 |    4.6
```

```
Results of Cost Analysis for Region 23
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:10 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 1990          |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |  838745100.    359822.      2331. | 2147364000.    465986.      4608. |  1308619000.       156.0
CHEM MFG    |      13542.        61.       222. |    6635081.     30551.       217. |     6621539.     48896.3
SURF COATG  |    2075429.      9217.       225. |   38596180.    112962.       342. |    36520750.      1759.7
FUEL COMB   |          0.         0.         0. |          0.         0.         0. |           0.         0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |           0.         0.0
MISC        |    3394086.     12700.       267. |    6183398.     23602.       262. |     2789312.        82.2
--------------------------------------------------------------------------------------------------------------
            |  844228200.    381800.      2211. | 2198779000.    633101.      3473. |  1354550000.       160.4
```

```
Results of Emission Projection for Region  24
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:10 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 1990                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    26778    24304        0        0    24304   9.2 |    31202    19835        0        0    19835  36.4 |  -18.4
CHEM MFG    |     2259     2236        0        0     2236   1.0 |     3181     3130        0        0     3130   1.6 |   40.0
SURF COATG  |    36824    34337        0        0    34337   6.8 |    57951    49671        0        0    49671  14.3 |   44.7
FUEL COMB   |     5396     5396        0        0     5396   0.0 |     6101     6101        0        0     6101   0.0 |   13.1
SOLV PURCH  |    92937    92937        0        0    92937   0.0 |   154438   154438        0        0   154438   0.0 |   66.2
MISC        |     1615     1599        0        0     1599   1.0 |     2277     2254        0        0     2254   1.0 |   41.0
-------------------------------------------------------------------------------------------------------------------------
            |   165809   160809        0        0   160809   3.0 |   255150   235429        0        0   235429   7.7 |   46.4
```

```
Results of Cost Analysis for Region 24
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:10 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 1990          |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |    2816847.      2474.      1139. |    3629860.     11367.       319. |      813013.        28.9
CHEM MFG    |       2760.        23.       120. |      19204.        51.       378. |       16444.       595.8
SURF COATG  |    -535868.      2487.         0. |    1905897.      8280.       230. |     2441765.         0.0
FUEL COMB   |          0.         0.         0. |          0.         0.         0. |           0.         0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |           0.         0.0
MISC        |          0.        16.         0. |          0.        23.         0. |           0.         0.0
--------------------------------------------------------------------------------------------------------------
            |    2283739.      5000.       457. |    5554961.     19721.       282. |     3271222.       143.2
```

```
Results of Emission Projection for Region  25
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:10 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                   |                    Proj Year = 1990                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    21851    21851        0        0    21851    0.0 |    23684    20593        0        0    20593   13.1 |   -5.8
CHEM MFG    |   109914     2680        0        0     2680   97.6 |   179008     3894        0        0     3894   97.8 |   45.3
SURF COATG  |    10399    10399        0        0    10399    0.0 |    16504    16224        0        0    16224    1.7 |   56.0
FUEL COMB   |    37088    37088        0        0    37088    0.0 |    44519    44519        0        0    44519    0.0 |   20.0
SOLV PURCH  |    57933    57933        0        0    57933    0.0 |    93186    93186        0        0    93186    0.0 |   60.9
MISC        |     4085     4085        0        0     4085    0.0 |     6082     6082        0        0     6082    0.0 |   48.9
-------------------------------------------------------------------------------------------------------------------------------
            |   241270   134036        0        0   134036   44.4 |   362984   184499        0        0   184499   49.2 |   37.6
```

```
Results of Cost Analysis for Region 25
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:10 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |            Proj Year = 1990              |
ID          |          Cost    Emis Red    Cost Eff |          Cost    Emis Red     Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |            0.          0.          0. |      -535232.       3092.           0. |     -535232.        0.0
CHEM MFG    |      -7291011.     107234.          0. |    -10756990.     175114.           0. |    -3465976.        0.0
SURF COATG  |            0.          0.          0. |        -9233.        280.           0. |       -9233.        0.0
FUEL COMB   |            0.          0.          0. |            0.          0.           0. |           0.        0.0
SOLV PURCH  |            0.          0.          0. |            0.          0.           0. |           0.        0.0
MISC        |            0.          0.          0. |            0.          0.           0. |           0.        0.0
-------------------------------------------------------------------------------------------------------------
            |      -7291011.     107234.          0. |    -11301450.     178486.           0. |    -4010441.        0.0
```

```
Results of Emission Projection for Region  26
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:11 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                   |                    Proj Year = 1990                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    56190     6224     7202     4618    10842   82.9 |    70653     6142     8191     1198     7340   90.7 |  -32.3
CHEM MFG    |    53376    49170       21       21    49191    7.9 |    70219    64966       28       10    64976    7.5 |   32.1
SURF COATG  |   210081    55459    46672    46654   102113   60.2 |   282122   101418    63883     9858   111277   67.8 |    9.0
FUEL COMB   |     2253     2163      441      441     2604    3.3 |     2842     2741      552      531     3272    3.6 |   25.7
SOLV PURCH  |    92524    92524    37792    37792   130316    0.0 |   142454   142454    58186    58186   200640    0.0 |   54.0
MISC        |    42599    11941       66       66    12007   71.9 |    57124    16124       75       41    16165   71.7 |   34.6
-------------------------------------------------------------------------------------------------------------------------------
            |   457023   217481    92194    89592   307073   44.1 |   625414   333845   130914    69825   403669   46.6 |   31.5
```

```
Results of Cost Analysis for Region 26
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:11 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |            Proj Year = 1990              |
ID          |          Cost    Emis Red    Cost Eff |          Cost    Emis Red     Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |    105914600.      52550.       2016. |    137387300.      71504.        1921. |    31472770.       29.7
CHEM MFG    |       125146.       4206.         30. |       172626.       5271.          33. |       47480.       37.9
SURF COATG  |     34307510.     154640.        222. |     41341300.     234728.         176. |     7033792.       20.5
FUEL COMB   |            0.         90.          0. |            0.        122.           0. |           0.        0.0
SOLV PURCH  |            0.          0.          0. |            0.          0.           0. |           0.        0.0
MISC        |      6803634.      30658.        222. |      9104586.      41033.         222. |     2300952.       33.8
-------------------------------------------------------------------------------------------------------------
            |    147150900.     242144.        608. |    188005900.     352658.         533. |    40854990.       27.8
```

```
Results of Emission Projection for Region  27
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:11 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                     |                  Proj Year = 1990                     |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC  |   %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    36087     9381        0         0     9381   74.0  |    44307     9027        0         0     9027   79.6  |   -3.8
CHEM MFG    |      131      131        0         0      131    0.0  |      174      174        0         0      174    0.0  |   33.0
FUEL COMB   |     2632     2632        0         0     2632    0.0  |     2747     2747        0         0     2747    0.0  |    4.4
SOLV PURCH  |     5079     5079        0         0     5079    0.0  |     7216     7216        0         0     7216    0.0  |   42.1
MISC        |     1351     1333        0         0     1333    1.3  |     1602     1580        0         0     1580    1.4  |   18.6
--------------------------------------------------------------------------------------------------------------------------
            |    45280    18556        0         0    18556   59.0  |    56047    20745        0         0    20745   63.0  |   11.8
```

```
Results of Cost Analysis for Region 27
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:11 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |          Proj Year = 1990            |
ID          |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff  |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |    61795050.      26706.      2314. |    78712540.      35280.      2231.  |    16917490.        27.4
CHEM MFG    |           0.          0.         0. |           0.          0.         0.  |           0.         0.0
FUEL COMB   |           0.          0.         0. |           0.          0.         0.  |           0.         0.0
SOLV PURCH  |           0.          0.         0. |           0.          0.         0.  |           0.         0.0
MISC        |        3996.         18.       222. |        4815.         22.       222.  |         819.        20.5
---------------------------------------------------------------------------------------------------------------
            |    61799040.      26724.      2312. |    78717350.      35302.      2230.  |    16918310.        27.4
```

```
Results of Emission Projection for Region  28
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:11 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                     |                  Proj Year = 1990                     |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC  |   %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      933      933     2387      2330     3263    1.7  |     1055      714     3047       237      950   76.8  |  -70.9
CHEM MFG    |      485      485        0         0      485    0.0  |      627      627        0         0      627    0.0  |   29.2
SURF COATG  |    31591    31561    20235      9792    41353   20.2  |    50314    43972    30920      8729    52701   35.1  |   27.4
FUEL COMB   |     2097     2097      481       481     2578    0.0  |     2299     2299      492       492     2791    0.0  |    8.3
SOLV PURCH  |    13924    13924     4892      4892    18816    0.0  |    20976    20976     7370      7370    28346    0.0  |   50.6
MISC        |       64       64       10        10       74    0.0  |       81       81       13        11       92    2.4  |   24.4
--------------------------------------------------------------------------------------------------------------------------
            |    49094    49064    28005     17505    66569   13.7  |    75353    68669    41842     16838    85507   27.0  |   28.4
```

```
Results of Cost Analysis for Region 28
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:11 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |          Proj Year = 1990            |
ID          |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff  |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |      132867.         57.      2331. |     -147383.       3152.         0.  |     -280250.      -210.9
CHEM MFG    |           0.          0.         0. |           0.          0.         0.  |           0.         0.0
SURF COATG  |     1725951.      10473.       165. |     5586994.      28534.       196.  |     3861043.       223.7
FUEL COMB   |           0.          0.         0. |           0.          0.         0.  |           0.         0.0
SOLV PURCH  |           0.          0.         0. |           0.          0.         0.  |           0.         0.0
MISC        |           0.          0.         0. |         507.          2.       222.  |         507.         0.0
---------------------------------------------------------------------------------------------------------------
            |     1858818.      10530.       177. |     5440118.      31688.       172.  |     3581300.       192.7
```

```
Results of Emission Projection for Region  29
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:11 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980               |                    Proj Year = 1990                    |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      527      527     3980     1686     2213  50.9 |      667      498     5929      340      837  87.3 |  -62.2
SURF COATG  |     1181     1181        0        0     1181   0.0 |     1878     1878        0        0     1878   0.0 |   59.1
FUEL COMB   |       48       48      181      181      229   0.0 |       73       73      263      263      336   0.0 |   46.8
SOLV PURCH  |     1450     1450     1445     1445     2895   0.0 |     2626     2626     2617     2617     5243   0.0 |   81.1
MISC        |        0        0        1        1        1   0.0 |        0        0        1        1        1  48.6 |  -34.5
-----------------------------------------------------------------------------------------------------------------------------
            |     3206     3206     5607     3313     6519  26.0 |     5245     5075     8811     3221     8296  41.0 |   27.3
```

```
Results of Cost Analysis for Region 29
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:11 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980             |            Proj Year = 1990           |
ID          |        Cost     Emis Red     Cost Eff |        Cost     Emis Red     Cost Eff |     Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------
PETROLEUM   |    1329053.        2294.         579. |    2870144.        5759.         498. |    1541091.       116.0
SURF COATG  |          0.           0.           0. |          0.           0.           0. |          0.         0.0
FUEL COMB   |          0.           0.           0. |          0.           0.           0. |          0.         0.0
SOLV PURCH  |          0.           0.           0. |          0.           0.           0. |          0.         0.0
MISC        |          0.           0.           0. |        138.           1.         222. |        138.         0.0
----------------------------------------------------------------------------------------------------------------
            |    1329053.        2294.         579. |    2870281.        5759.         498. |    1541228.       116.0
```

```
Results of Emission Projection for Region  30
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:12 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980               |                    Proj Year = 1990                    |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    59410     3846     3846  93.5 |        0        0    96924     1557     1557  98.4 |  -59.5
CHEM MFG    |        0        0      526      526      526   0.0 |        0        0      950      249      249  73.8 |  -52.6
SURF COATG  |        0        0    21951    14618    14618  33.4 |        0        0    34621     9158     9158  73.5 |  -37.4
FUEL COMB   |        0        0      241      241      241   0.0 |        0        0      368      368      368   0.0 |   52.6
SOLV PURCH  |        0        0    27436    27436    27436   0.0 |        0        0    49288    49288    49288   0.0 |   79.6
MISC        |        0        0      632      632      632   0.0 |        0        0     1020      777      777  23.8 |   23.0
-----------------------------------------------------------------------------------------------------------------------------
            |        0        0   110196    47299    47299  57.1 |        0        0   183170    61397    61397  66.5 |   29.8
```

```
Results of Cost Analysis for Region 30
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:12 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980             |            Proj Year = 1990           |
ID          |        Cost     Emis Red     Cost Eff |        Cost     Emis Red     Cost Eff |     Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------
PETROLEUM   |  122062900.       55564.        2197. |  418045700.       95367.        4384. |  295982800.       242.5
CHEM MFG    |          0.           0.           0. |     155619.         701.         222. |     155619.         0.0
SURF COATG  |    3768585.        7333.         514. |   11101100.       25463.         436. |    7332515.       194.6
FUEL COMB   |          0.           0.           0. |          0.           0.           0. |          0.         0.0
SOLV PURCH  |          0.           0.           0. |          0.           0.           0. |          0.         0.0
MISC        |          0.           0.           0. |      63053.         243.         260. |      63053.         0.0
----------------------------------------------------------------------------------------------------------------
            |  125831500.       62897.        2001. |  429365500.      121773.        3526. |  303534000.       241.2
```

```
Results of Emission Projection for Region  31
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:12 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                    |                 Proj Year = 1990                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   406286    48137    48137  88.2 |        0        0   474762    25598    25598  94.6 |  -46.8
CHEM MFG    |        0        0   147127    21362    21362  85.5 |        0        0   206135     8678     8678  95.8 |  -59.4
SURF COATG  |        0        0    16779     9921     9921  40.9 |        0        0    23736     5742     5742  75.8 |  -42.1
FUEL COMB   |        0        0     8262     8160     8160   1.2 |        0        0    11456    11350    11350   0.9 |   39.1
SOLV PURCH  |        0        0   200270   200270   200270   0.0 |        0        0   293852   293852   293852   0.0 |   46.7
MISC        |        0        0   250278    67189    67189  73.2 |        0        0   310357    37832    37832  87.8 |  -43.7
------------------------------------------------------------------------------------------------------------------------
            |        0        0  1031002   355039   355039  65.6 |        0        0  1320296   383051   383051  71.0 |    7.9
```

```
Results of Cost Analysis for Region 31
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:12 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |           Proj Year = 1990             |
ID          |        Cost     Emis Red    Cost Eff |          Cost     Emis Red    Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |   456773800.     360149.       1268. |   1110551000.     449164.       2472. |   653777000.     143.1
CHEM MFG    |     1302154.     125765.         10. |      7625316.     197457.         39. |     6323162.     485.6
SURF COATG  |     1572060.       6858.        229. |      3928781.      17994.        218. |     2356721.     149.9
FUEL COMB   |           0.        102.          0. |            0.        106.          0. |           0.       0.0
SOLV PURCH  |           0.          0.          0. |            0.          0.          0. |           0.       0.0
MISC        |    82684060.     183089.        452. |    119823700.     272525.        440. |    37139630.      44.9
--------------------------------------------------------------------------------------------------------------
            |   542332000.     675963.        802. |   1241929000.     937246.       1325. |   699596700.     129.0
```

```
Results of Emission Projection for Region  32
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:12 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                    |                 Proj Year = 1990                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     9147     5195    23790    23790    28985  12.0 |    12115     4621    36374     2368     6989  85.6 |  -75.9
SURF COATG  |      350        7        0        0        7  98.0 |      540       11        0        0       11  98.0 |   54.2
FUEL COMB   |    22641    22641       47       47    22688   0.0 |    23763    23763       72       72    23835   0.0 |    5.1
SOLV PURCH  |     4603     4603     3921     3921     8524   0.0 |     8271     8271     7045     7045    15316   0.0 |   79.7
MISC        |      677      677        5        5      682   0.0 |      932      932        6        3      935   0.3 |   37.1
------------------------------------------------------------------------------------------------------------------------
            |    37418    33123    27763    27763    60886   6.6 |    45620    37597    43498     9489    47086  47.2 |  -22.7
```

```
Results of Cost Analysis for Region 32
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:12 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |           Proj Year = 1990             |
ID          |        Cost     Emis Red    Cost Eff |          Cost     Emis Red    Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |     9212112.       3952.       2331. |      7856740.      41500.        189. |    -1355373.     -14.7
SURF COATG  |     1346961.        343.       3927. |      2076934.        529.       3927. |      729973.      54.2
FUEL COMB   |           0.          0.          0. |            0.          0.          0. |           0.       0.0
SOLV PURCH  |           0.          0.          0. |            0.          0.          0. |           0.       0.0
MISC        |           0.          0.          0. |          445.          3.        141. |         445.       0.0
--------------------------------------------------------------------------------------------------------------
            |    10559070.       4295.       2458. |      9934118.      42032.        236. |     -624955.      -5.9
```

```
Results of Emission Projection for Region  33
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:13 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                   |                   Proj Year = 1990                    |
ID          |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC  |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC  |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      1391     1279    24591    24591    25870   0.4  |      1402     1282    21363    16016    17298  24.0  |  -33.1
CHEM MFG    |       517      517     1151     1151     1668   0.0  |       788      456     1670      543      999  59.4  |  -40.1
SURF COATG  |     15328    15328    26867    26867    42195   0.0  |     20730    20590    36337    17491    38081  33.3  |   -9.8
FUEL COMB   |      2564     2564     4055     4055     6619   0.0  |      3158     3158     5014     5014     8172   0.0  |   23.5
SOLV PURCH  |    126654   126654   225162   225162   351816   0.0  |    180924   180924   321641   321641   502564   0.0  |   42.8
MISC        |     32254    32254    35868    35404    67658   0.7  |     38013    37682    45231    33975    71657  13.9  |    5.9
---------------------------------------------------------------------------------------------------------------------------
            |    178708   178596   317694   317230   495826   0.1  |    245014   244091   431256   394680   638771   5.5  |   28.8


Results of Cost Analysis for Region 33
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:13 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |           Proj Year = 1990             |
ID          |        Cost    Emis Red    Cost Eff   |        Cost    Emis Red    Cost Eff    |      Abs Chg     Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |      -2688.       112.          0.    |    -105248.       5466.          0.    |    -102560.          0.0
CHEM MFG    |         0.          0.          0.    |     468952.       1460.        321.    |     468952.          0.0
SURF COATG  |         0.          0.          0.    |    4182565.      18986.        220.    |    4182565.          0.0
FUEL COMB   |         0.          0.          0.    |         0.          0.          0.    |         0.           0.0
SOLV PURCH  |         0.          0.          0.    |         0.          0.          0.    |         0.           0.0
MISC        |    225504.        464.        486.    |    5609379.      11587.        484.    |    5383875.       2387.5
----------------------------------------------------------------------------------------------------------
            |    222816.        576.        387.    |   10155650.      37499.        271.    |    9932832.       4457.9


Results of Emission Projection for Region  34
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:13 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                   |                   Proj Year = 1990                    |
ID          |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC  |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC  |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     36054     7996     5480     2098    10094  75.7  |     47670     8814     8128      423     9237  83.4  |   -8.5
CHEM MFG    |   1091207    39849     2283     2283    42132  96.1  |   1552778    59393     3523      398    59791  96.2  |   41.9
SURF COATG  |     40170    38793      819      819    39612   3.4  |     75713    63005     1358      402    63407  17.7  |   60.1
FUEL COMB   |      8050     8050      247      247     8297   0.0  |     10823    10823      295      295    11118   0.0  |   34.0
SOLV PURCH  |    128112   128112     6743     6743   134855   0.0  |    205321   205321    10807    10807   216128   0.0  |   60.3
MISC        |     59673    12454        0        0    12454  79.1  |     75648    15182        0        0    15182  79.9  |   21.9
---------------------------------------------------------------------------------------------------------------------------
            |   1363266   235254    15572    12190   247444  82.1  |   1967952   362538    24110    12325   374863  81.2  |   51.5


Results of Cost Analysis for Region 34
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:13 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |           Proj Year = 1990             |
ID          |        Cost    Emis Red    Cost Eff   |        Cost    Emis Red    Cost Eff    |      Abs Chg     Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |   30330310.      31440.        965.   |   45235400.      46561.        972.    |   14905080.         49.1
CHEM MFG    |  -11556510.    1051358.          0.   |  -14995220.    1496510.          0.    |   -3438706.          0.0
SURF COATG  |     312579.       1377.        227.   |    1782259.      13664.        130.    |    1469680.        470.2
FUEL COMB   |         0.          0.          0.    |         0.          0.          0.    |         0.           0.0
SOLV PURCH  |         0.          0.          0.    |         0.          0.          0.    |         0.           0.0
MISC        |   21567230.      47219.        457.   |   27751610.      60465.        459.    |    6184372.         28.7
----------------------------------------------------------------------------------------------------------
            |   40653620.    1131394.         36.   |   59774040.    1617200.         37.    |   19120420.         47.0
```

```
Results of Emission Projection for Region  35
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:13 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                    |                  Proj Year = 1990                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1340     1340        0        0     1340   0.0 |     1228     1110        0        0     1110   9.6 |  -17.2
FUEL COMB   |      601      601        0        0      601   0.0 |      822      822        0        0      822   0.0 |   36.7
SOLV PURCH  |     4186     4186        0        0     4186   0.0 |     6819     6819        0        0     6819   0.0 |   62.9
----------------------------------------------------------------------------------------------------------------------------
            |     6127     6127        0        0     6127   0.0 |     8868     8750        0        0     8750   1.3 |   42.8


Results of Cost Analysis for Region 35
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:13 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980           |         Proj Year = 1990            |
ID          |        Cost     Emis Red  Cost Eff |          Cost    Emis Red  Cost Eff |       Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------
PETROLEUM   |          0.         0.        0. |        -2514.        118.        0. |        -2514.         0.0
FUEL COMB   |          0.         0.        0. |           0.          0.        0. |           0.          0.0
SOLV PURCH  |          0.         0.        0. |           0.          0.        0. |           0.          0.0
----------------------------------------------------------------------------------------------------------------
            |          0.         0.        0. |        -2514.        118.        0. |        -2514.         0.0


Results of Emission Projection for Region  36
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:14 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                    |                  Proj Year = 1990                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    93995    20404    20404  78.3 |        0        0    89545    10933    10933  87.8 |  -46.4
CHEM MFG    |        0        0    91620    23471    23471  74.4 |        0        0   122231    11710    11710  90.4 |  -50.1
SURF COATG  |        0        0   175053    93074    93074  46.8 |        0        0   240513    53947    53947  77.6 |  -42.0
FUEL COMB   |        0        0    25278    25278    25278   0.0 |        0        0    25720    25720    25720   0.0 |    1.7
SOLV PURCH  |        0        0   334152   334152   334152   0.0 |        0        0   468909   468909   468909   0.0 |   40.3
MISC        |        0        0    49990    21382    21382  57.2 |        0        0    55892    11748    11748  79.0 |  -45.1
----------------------------------------------------------------------------------------------------------------------------
            |        0        0   770088   517761   517761  32.8 |        0        0  1002810   582967   582967  41.9 |   12.6


Results of Cost Analysis for Region 36
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:14 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980           |         Proj Year = 1990            |
ID          |        Cost     Emis Red  Cost Eff |          Cost    Emis Red  Cost Eff |       Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------
PETROLEUM   |   24973600.     73591.      339. |     60247500.     78612.      766. |     35273900.       141.2
CHEM MFG    |    3310755.     68149.       49. |      6587312.    110521.       60. |      3276557.        99.0
SURF COATG  |   15385890.     81979.      188. |     44016250.    186566.      236. |     28630360.       186.1
FUEL COMB   |          0.         0.        0. |           0.          0.        0. |           0.          0.0
SOLV PURCH  |          0.         0.        0. |           0.          0.        0. |           0.          0.0
MISC        |    6288756.     28608.      220. |      9551712.     44145.      216. |      3262956.        51.9
----------------------------------------------------------------------------------------------------------------
            |   49959010.    252327.      198. |    120402800.    419843.      287. |     70443780.       141.0
```

```
Results of Emission Projection for Region  37
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:14 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                    |                   Proj Year = 1990                    |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    58888    48710   650426     5503    54213   92.4  |    63217    38577   657580     4348    42926   94.0  |  -20.8
CHEM MFG    |     6106     4648     1619     1619     6267   18.9  |     8866     7159     2449      233     7392   34.7  |   18.0
SURF COATG  |   663776     1430     9173     4189     5619   99.2  |  1041880     8240    13946      309     8549   99.2  |   52.1
FUEL COMB   |    35147    35147     9836     9836    44983    0.0  |    39173    39173    11064    11064    50238    0.0  |   11.7
SOLV PURCH  |    34992    34992     8288     8288    43280    0.0  |    59240    59240    14031    14031    73271    0.0  |   69.3
MISC        |     2178     2178     1994      905     3083   26.1  |     2737     2737     2855      567     3304   40.9  |    7.2
-------------------------------------------------------------------------------------------------------------------------
            |   801087   127105   681336    30340   157445   89.4  |  1215113   155127   701926    30552   185679   90.3  |   17.9
```

```
Results of Cost Analysis for Region 37
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:14 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980            |          Proj Year = 1990            |
ID          |        Cost     Emis Red  Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |   56565800.     655101.       86.  |    79883230.    677872.       118.  |   23317430.       41.2
CHEM MFG    |    1331154.       1458.      913.  |     3193627.      3923.       814.  |    1862473.      139.9
SURF COATG  |  118799200.     667330.      178.  |   194292000.   1047277.       186.  |   75492830.       63.5
FUEL COMB   |          0.          0.        0.  |           0.         0.         0.  |          0.        0.0
SOLV PURCH  |          0.          0.        0.  |           0.         0.         0.  |          0.        0.0
MISC        |     241758.       1089.      222.  |      427037.      2288.       187.  |     185279.       76.6
--------------------------------------------------------------------------------------------------------------
            |  176937900.    1324978.      134.  |   277795900.   1731359.       160.  |  100858000.       57.0
```

```
Results of Emission Projection for Region  38
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:14 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                    |                   Proj Year = 1990                    |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   122071     6323      400       20     6343   94.8  |   162308     8270      532       11     8282   94.9  |   30.6
CHEM MFG    |    13331    13331     1112     1112    14443    0.0  |    18998    18998     1146      544    19542    3.0  |   35.3
SURF COATG  |     3434     3434     4735     4735     8169    0.0  |     4734     4389     6822     2520     6909   40.2  |  -15.4
FUEL COMB   |     7051     7051     2271     2271     9322    0.0  |     8665     8665     2844     2844    11509    0.0  |   23.5
SOLV PURCH  |    34141    34141     8537     8537    42678    0.0  |    50824    50824    12709    12709    63533    0.0  |   48.9
MISC        |     3658     3658      536      536     4194    0.0  |     4833     4833      654      400     5233    4.6  |   24.8
-------------------------------------------------------------------------------------------------------------------------
            |   183686    67938    17591    17211    85149   57.7  |   250362    95979    24707    19028   115007   58.2  |   35.1
```

```
Results of Cost Analysis for Region 38
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:14 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980            |          Proj Year = 1990            |
ID          |        Cost     Emis Red  Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |  270694400.     116128.     2331.  |   360079300.    154559.      2330.  |   89384930.       33.0
CHEM MFG    |          0.          0.        0.  |       76538.       602.       127.  |      76538.        0.0
SURF COATG  |          0.          0.        0.  |      534693.      4647.       115.  |     534693.        0.0
FUEL COMB   |          0.          0.        0.  |           0.         0.         0.  |          0.        0.0
SOLV PURCH  |          0.          0.        0.  |           0.         0.         0.  |          0.        0.0
MISC        |          0.          0.        0.  |       56386.       254.       222.  |      56386.        0.0
--------------------------------------------------------------------------------------------------------------
            |  270694400.     116128.     2331.  |   360746900.    160062.      2254.  |   90052540.       33.3
```

```
Results of Emission Projection for Region  39
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:15 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                    Base Year = 1980                  |                    Proj Year = 1990                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0   231232    49846    49846   78.4 |        0        0   237969    24611    24611   89.7 |  -50.6
CHEM MFG   |        0        0    99770    16879    16879   83.1 |        0        0   126087     5875     5875   95.3 |  -65.2
SURF COATG |        0        0   223368   126026   126026   43.6 |        0        0   282125    74757    74757   73.5 |  -40.7
FUEL COMB  |        0        0    14866    14746    14746    0.8 |        0        0    14232    14086    14086    1.0 |   -4.5
SOLV PURCH |        0        0   295168   295168   295168    0.0 |        0        0   397145   397145   397145    0.0 |   34.5
MISC       |        0        0    61365    43464    43464   29.2 |        0        0    77221    25932    25932   66.4 |  -40.3
---------------------------------------------------------------------------------------------------------------------------
           |        0        0   925769   546129   546129   41.0 |        0        0  1134778   542405   542405   52.2 |   -0.7
```

```
Results of Cost Analysis for Region 39
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:15 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |         Base Year = 1980            |          Proj Year = 1990           |
ID         |       Cost     Emis Red    Cost Eff |       Cost     Emis Red    Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |  279040000.    181386.      1538. |  568065500.    213358.      2663. |  289025500.      103.6
CHEM MFG   |     190628.     82891.         2. |   18872450.    120212.       157. |   18681820.     9800.1
SURF COATG |   26654080.     97342.       274. |   64332720.    207368.       310. |   37678640.      141.4
FUEL COMB  |         0.       120.         0. |          0.       146.         0. |          0.        0.0
SOLV PURCH |         0.         0.         0. |          0.         0.         0. |          0.        0.0
MISC       |    3843936.     17901.       215. |   11195770.     51289.       218. |    7351838.      191.3
-------------------------------------------------------------------------------------------------------------
           |  309728600.    379640.       816. |  662466500.    592373.      1118. |  352737900.      113.9
```

```
Results of Emission Projection for Region  41
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:15 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                    Base Year = 1980                  |                    Proj Year = 1990                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0     3265     3037     3037    7.0 |        0        0     4197      984      984   76.6 |  -67.6
CHEM MFG   |        0        0     8059      497      497   93.8 |        0        0     9471      193      193   98.0 |  -61.2
SURF COATG |        0        0    11578     8978     8978   22.5 |        0        0    13813     5195     5195   62.4 |  -42.1
FUEL COMB  |        0        0      149      149      149    0.0 |        0        0      189      189      189    0.0 |   26.5
SOLV PURCH |        0        0    37388    37388    37388    0.0 |        0        0    55163    55163    55163    0.0 |   47.5
MISC       |        0        0      597      119      119   80.1 |        0        0      671       72       72   89.3 |  -39.5
---------------------------------------------------------------------------------------------------------------------------
           |        0        0    61036    50168    50168   17.8 |        0        0    83503    61795    61795   26.0 |   23.2
```

```
Results of Cost Analysis for Region 41
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:15 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |         Base Year = 1980            |          Proj Year = 1990           |
ID         |       Cost     Emis Red    Cost Eff |       Cost     Emis Red    Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |     531468.       228.      2331. |    2314965.      3213.       720. |    1783497.      335.6
CHEM MFG   |    -113430.      7562.         0. |    -117190.      9278.         0. |      -3760.        0.0
SURF COATG |     512732.      2600.       197. |    3406421.      8618.       395. |    2893689.      564.4
FUEL COMB  |         0.         0.         0. |          0.         0.         0. |          0.        0.0
SOLV PURCH |         0.         0.         0. |          0.         0.         0. |          0.        0.0
MISC       |      41108.       478.        86. |      60733.       599.       101. |      19625.       47.7
-------------------------------------------------------------------------------------------------------------
           |     971878.     10868.        89. |    5664928.     21708.       261. |    4693050.      482.9
```

```
Results of Emission Projection for Region  42
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:15 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                 |                  Proj Year = 1990                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0    58275     8087     8087  86.1 |        0        0    71085     2247     2247  96.8 |  -72.2
CHEM MFG   |        0        0    95982    33475    33475  65.1 |        0        0   137704    16281    16281  88.2 |  -51.4
SURF COATG |        0        0   196034   160290   160290  18.3 |        0        0   327351    95714    95714  70.8 |  -40.3
FUEL COMB  |        0        0     4684     4684     4684   0.0 |        0        0     5856     5856     5856   0.0 |   25.0
SOLV PURCH |        0        0    70020    70020    70020   0.0 |        0        0   108459   108459   108459   0.0 |   54.9
MISC       |        0        0    27592    20581    20581  25.4 |        0        0    34721    13352    13352  61.5 |  -35.1
-----------------------------------------------------------------------------------------------------------------------------
           |        0        0   452647   297137   297137  34.4 |        0        0   685175   241909   241909  64.7 |  -18.6
```

```
Results of Cost Analysis for Region 42
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:15 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |           Proj Year = 1990          |
ID         |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |     Abs Chg  Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |   21976620.     50188.       438. |   34854980.     68837.       506. |   12878360.      58.6
CHEM MFG   |   -1789561.     62507.         0. |      39249.    121423.         0. |    1828810.       0.0
SURF COATG |   11232350.     35804.       314. |   83733650.    231636.       361. |   72501300.     645.5
FUEL COMB  |          0.         0.         0. |          0.         0.         0. |          0.       0.0
SOLV PURCH |          0.         0.         0. |          0.         0.         0. |          0.       0.0
MISC       |     602946.      7011.        86. |    2071280.     21369.        97. |    1468334.     243.5
-------------------------------------------------------------------------------------------------------------
           |   32022360.    155510.       206. |  120699200.    443266.       272. |   88676800.     276.9
```

```
Results of Emission Projection for Region  43
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:16 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                 |                  Proj Year = 1990                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     1672     1672        0        0     1672   0.0 |     1929     1349        0        0     1349  30.0 |  -19.3
FUEL COMB  |      194      194        0        0      194   0.0 |      259      259        0        0      259   0.0 |   33.8
SOLV PURCH |     6538     6538        0        0     6538   0.0 |    11291    11291        0        0    11291   0.0 |   72.7
MISC       |     1162     1162        0        0     1162   0.0 |     1480     1480        0        0     1480   0.0 |   27.3
-----------------------------------------------------------------------------------------------------------------------------
           |     9566     9566        0        0     9566   0.0 |    14959    14380        0        0    14380   3.9 |   50.3
```

```
Results of Cost Analysis for Region 43
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:16 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |           Proj Year = 1990          |
ID         |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |     Abs Chg  Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |          0.         0.         0. |     -87518.       580.         0. |     -87518.       0.0
FUEL COMB  |          0.         0.         0. |          0.         0.         0. |          0.       0.0
SOLV PURCH |          0.         0.         0. |          0.         0.         0. |          0.       0.0
MISC       |          0.         0.         0. |          0.         0.         0. |          0.       0.0
-------------------------------------------------------------------------------------------------------------
           |          0.         0.         0. |     -87518.       580.         0. |     -87518.       0.0
```

```
Results of Emission Projection for Region  44
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:16 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                  |                    Proj Year = 1990                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    18214     8070     8070  55.7 |        0        0    26996     3323     3323  87.7 |  -58.8
CHEM MFG    |        0        0   864272    60147    60147  93.0 |        0        0  1139868    29755    29755  97.4 |  -50.5
SURF COATG  |        0        0   100250    60459    60459  39.7 |        0        0   160844    37504    37504  76.7 |  -38.0
FUEL COMB   |        0        0    17364    17364    17364   0.0 |        0        0    22536    22536    22536   0.0 |   29.8
SOLV PURCH  |        0        0    87525    87525    87525   0.0 |        0        0   139077   139077   139077   0.0 |   58.9
MISC        |        0        0    85849    11801    11801  86.3 |        0        0   112932     8335     8335  92.6 |  -29.4
-------------------------------------------------------------------------------------------------------------------------
            |        0        0  1173474   245366   245366  79.1 |        0        0  1602253   240531   240531  85.0 |   -2.0
```

```
Results of Cost Analysis for Region 44
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:16 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980             |        Proj Year = 1990              |
ID          |        Cost    Emis Red   Cost Eff  |        Cost    Emis Red   Cost Eff   |     Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |   23363040.     10144.      2303.   |    73618010.     23673.      3110.   |   50254960.     215.1
CHEM MFG    |   17911160.    804125.        22.   |    26799180.   1110113.        24.   |    8888028.      49.6
SURF COATG  |   22261760.     39791.       559.   |    57322250.    123340.       465.   |   35060490.     157.5
FUEL COMB   |          0.         0.         0.   |           0.         0.         0.   |          0.       0.0
SOLV PURCH  |          0.         0.         0.   |           0.         0.         0.   |          0.       0.0
MISC        |    6529968.     74048.        88.   |    10242000.    104596.        98.   |    3712027.      56.8
-----------------------------------------------------------------------------------------------------------
            |   70065930.    928108.        75.   |   167981400.   1361722.       123.   |   97915510.     139.7
```

```
Results of Emission Projection for Region  45
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:16 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                  |                    Proj Year = 1990                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   938580   158438  1948311   151939   310377  89.2 |  1065461   118186  2197578    77907   196093  94.0 |  -36.8
CHEM MFG    |  6636224   216664  2744492   119028   335692  96.4 | 10058376   342514  4191484    41661   384175  97.3 |   14.4
SURF COATG  |    87575    85202    30085    29745   114947   2.3 |   150828   147179    51383    18144   165323  18.2 |   43.8
FUEL COMB   |   360485   320582   153735   153636   474218   7.8 |   383703   335574   159771   153623   489196  10.0 |    3.2
SOLV PURCH  |   146774   146774    75611    75611   222385   0.0 |   229271   229271   118110   118110   347381   0.0 |   56.2
MISC        |   126954   120659    10659     7652   128311   6.8 |   186729   175451    15068     7182   182633   9.5 |   42.3
-------------------------------------------------------------------------------------------------------------------------
            |  8296592  1048319  4962893   537611  1585930  88.0 | 12074369  1348175  6733394   416627  1764802  90.6 |   11.3
```

```
Results of Cost Analysis for Region 45
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:16 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980             |        Proj Year = 1990              |
ID          |        Cost    Emis Red   Cost Eff  |        Cost    Emis Red   Cost Eff   |     Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |  922628700.   2576514.       358.   |  1428964000.   3066946.       466.   |  506335800.      54.9
CHEM MFG    | 4227248000.   9045024.       467.   |  6390999000.  13865690.       461.   | 2163751000.      51.2
SURF COATG  |    2824090.      2713.      1041.   |    12584990.     36889.       341.   |    9760901.     345.6
FUEL COMB   |          0.     40002.         0.   |           0.     54277.         0.   |          0.       0.0
SOLV PURCH  |          0.         0.         0.   |           0.         0.         0.   |          0.       0.0
MISC        |    2387352.      9302.       257.   |     5475691.     19165.       286.   |    3088339.     129.4
-----------------------------------------------------------------------------------------------------------
            | 5155088000.  11673560.       442.   |  7838024000.  17042960.       460.   | 2682935000.      52.0
```

```
Results of Emission Projection for Region  46
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:17 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |               Base Year = 1980                      |                Proj Year = 1990                       |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    13374     9026        6        6     9032   32.5 |    14168     7223        6        4     7227   49.0 |  -20.0
CHEM MFG    |      246      246        0        0      246    0.0 |      301      301        0        0      301    0.0 |   22.5
SURF COATG  |      170      170        0        0      170    0.0 |      270      270        0        0      270    0.0 |   58.7
FUEL COMB   |     6146     6146      818      323     6469    7.1 |     7438     7343     1046      515     7858    7.4 |   21.5
SOLV PURCH  |    17210    17210      351      351    17561    0.0 |    31215    31215      637      637    31851    0.0 |   81.4
MISC        |      370      370        2        2      372    0.0 |      547      547        2        1      548    0.2 |   47.3
-------------------------------------------------------------------------------------------------------------------------------
            |    37516    33168     1177      682    33850   12.5 |    53939    46898     1692     1157    48055   13.6 |   42.0
```

```
Results of Cost Analysis for Region 46
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:17 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980            |        Proj Year = 1990            |
ID          |       Cost    Emis Red    Cost Eff |        Cost   Emis Red    Cost Eff |     Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |   9214092.       4348.       2119. |   10902710.      6948.       1569. |    1688613.        18.3
CHEM MFG    |         0.          0.          0. |          0.         0.          0. |          0.         0.0
SURF COATG  |         0.          0.          0. |          0.         0.          0. |          0.         0.0
FUEL COMB   |         0.        495.          0. |          0.       626.          0. |          0.         0.0
SOLV PURCH  |         0.          0.          0. |          0.         0.          0. |          0.         0.0
MISC        |         0.          0.          0. |        263.         1.        222. |        263.         0.0
-----------------------------------------------------------------------------------------------------------
            |   9214092.       4843.       1903. |   10902970.      7575.       1439. |    1688876.        18.3
```

```
Results of Emission Projection for Region  47
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:17 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |               Base Year = 1980                      |                Proj Year = 1990                       |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0      536      384      384   28.4 |        0        0      731       41       41   94.4 |  -89.4
CHEM MFG    |        3        3       15       15       18    0.0 |        4        4       23       10       14   48.5 |  -21.6
SURF COATG  |     1697     1663     1154     1069     2732    4.2 |     2121     1997     1444      723     2720   23.7 |   -0.4
FUEL COMB   |       61       61       67       67      128    0.0 |       86       86       94       94      180    0.0 |   40.3
SOLV PURCH  |     4094     4094     4094     4094     8188    0.0 |     7055     7055     7055     7055    14110    0.0 |   72.3
MISC        |      324      324      398      398      722    0.0 |      414      414      607      607     1021    0.0 |   41.4
-------------------------------------------------------------------------------------------------------------------------------
            |     6179     6145     6264     6027    12172    2.2 |     9680     9556     9955     8529    18085    7.9 |   48.6
```

```
Results of Cost Analysis for Region 47
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:17 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980            |        Proj Year = 1990            |
ID          |       Cost    Emis Red    Cost Eff |        Cost   Emis Red    Cost Eff |     Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |    354312.        152.       2331. |    1008337.       691.       1460. |     654025.       184.6
CHEM MFG    |         0.          0.          0. |        186.        13.         14. |        186.         0.0
SURF COATG  |    129710.        119.       1090. |     408462.       845.        483. |     278752.       214.9
FUEL COMB   |         0.          0.          0. |          0.         0.          0. |          0.         0.0
SOLV PURCH  |         0.          0.          0. |          0.         0.          0. |          0.         0.0
MISC        |         0.          0.          0. |          0.         0.          0. |          0.         0.0
-----------------------------------------------------------------------------------------------------------
            |    484022.        271.       1786. |    1416985.      1549.        915. |     932963.       192.8
```

```
Results of Emission Projection for Region  48
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:17 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                      |                  Proj Year = 1990                    |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   115631     8798     5704     1960    10758   91.1 |   121876     8060     8008      838     8898   93.1 |  -17.3
CHEM MFG    |   426513    29475     1973     1973    31448   92.7 |   434034    35585     2884      852    36436   91.7 |   15.9
SURF COATG  |    39019    32945     3054     3054    35999   14.4 |    60212    48270     4698     1566    49837   23.2 |   38.4
FUEL COMB   |     4710     4710      511      511     5221    0.0 |     5547     5547      596      596     6144    0.0 |   17.7
SOLV PURCH  |    72563    72563     8063     8063    80626    0.0 |   115028   115028    12782    12782   127809    0.0 |   58.5
MISC        |    20920    18953     2977     2977    21930    8.2 |    31058    27570     4506     1758    29328   17.5 |   33.7
----------------------------------------------------------------------------------------------------------------------------
            |   679356   167444    22282    18538   185982   73.5 |   767755   240060    33473    18392   258452   67.7 |   39.0


Results of Cost Analysis for Region 48
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:17 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980             |        Proj Year = 1990              |
ID          |       Cost    Emis Red    Cost Eff  |        Cost    Emis Red    Cost Eff  |     Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |   17607490.    110577.        159.  |   48315050.    120985.        399.  |   30707560.      174.4
CHEM MFG    |   -5517937.    397038.          0.  |   -4748402.    400482.          0.  |     769536.        0.0
SURF COATG  |    1217473.      6074.        200.  |    2697868.     15073.        179.  |    1480395.      121.6
FUEL COMB   |          0.         0.          0.  |          0.         0.          0.  |          0.        0.0
SOLV PURCH  |          0.         0.          0.  |          0.         0.          0.  |          0.        0.0
MISC        |     434838.      1967.        221.  |    2045480.      6236.        328.  |    1610642.      370.4
--------------------------------------------------------------------------------------------------------------
            |   13741870.    515656.         27.  |   48310000.    542776.         89.  |   34568130.      251.6


Results of Emission Projection for Region  49
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:18 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                      |                  Proj Year = 1990                    |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   141490    11641     8954     8596    20237   86.5 |   185703    11017    10812     4320    15337   92.2 |  -24.2
CHEM MFG    |    98597      509      398      349      858   99.1 |   192118      997      649      171     1168   99.4 |   36.1
SURF COATG  |      642      642     3349     3327     3969    0.6 |      790      768     4277     2018     2786   45.0 |  -29.8
FUEL COMB   |     4983     4983     5221     4495     9478    7.1 |     5990     5574     6399     5880    11455    7.5 |   20.9
SOLV PURCH  |    30571    30571    23063    23063    53634    0.0 |    45896    45896    34624    34624    80520    0.0 |   50.1
MISC        |    15336    11276     4716     4383    15659   21.9 |    19727    15624     6064     2888    18512   28.2 |   18.2
----------------------------------------------------------------------------------------------------------------------------
            |   291619    59622    45701    44213   103835   69.2 |   450224    79877    62825    49901   129778   74.7 |   25.0


Results of Cost Analysis for Region 49
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:18 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980             |        Proj Year = 1990              |
ID          |       Cost    Emis Red    Cost Eff  |        Cost    Emis Red    Cost Eff  |     Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |    -717160.    130207.          0.  |    -570909.    181178.          0.  |     146251.        0.0
CHEM MFG    |   -1457061.     98137.          0.  |   -2610512.    191599.          0.  |   -1153451.        0.0
SURF COATG  |       4994.        22.        227.  |     559737.      2281.        245.  |     554743.    11108.2
FUEL COMB   |          0.       726.          0.  |          0.       935.          0.  |          0.        0.0
SOLV PURCH  |          0.         0.          0.  |          0.         0.          0.  |          0.        0.0
MISC        |     975246.      4393.        222.  |    1652576.      7279.        227.  |     677330.       69.5
--------------------------------------------------------------------------------------------------------------
            |   -1193981.    233485.          0.  |    -969109.    383271.          0.  |     224872.        0.0
```

```
Results of Emission Projection for Region  50
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:18 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                     |                  Proj Year = 1990                      |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr     LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr     LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      112      112        0         0      112     0.0 |      116       84        0         0       84    27.7 |  -24.9
CHEM MFG    |    99269      556        0         0      556    99.4 |   147645      748        0         0      748    99.5 |   34.5
FUEL COMB   |    10152    10152        0         0    10152     0.0 |     9415     9415        0         0     9415     0.0 |   -7.3
SOLV PURCH  |    21768    21768        0         0    21768     0.0 |    28964    28964        0         0    28964     0.0 |   33.1
MISC        |    10786    10786        0         0    10786     0.0 |    12992     4070        0         0     4070    68.7 |  -62.3
-----------------------------------------------------------------------------------------------------------------------------
            |   142087    43374        0         0    43374    69.5 |   199132    43281        0         0    43281    78.3 |   -0.2
```

```
Results of Cost Analysis for Region 50
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:18 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |          Proj Year = 1990           |
ID          |         Cost      Emis Red   Cost Eff |         Cost  Emis Red   Cost Eff |     Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------
PETROLEUM   |           0.           0.         0. |        7167.       32.       222. |       7167.         0.0
CHEM MFG    |     7277019.       98713.        74. |    12100450.   146898.        82. |    4823426.        66.3
FUEL COMB   |           0.           0.         0. |           0.        0.         0. |          0.         0.0
SOLV PURCH  |           0.           0.         0. |           0.        0.         0. |          0.         0.0
MISC        |           0.           0.         0. |     1980593.     8922.       222. |    1980593.         0.0
-------------------------------------------------------------------------------------------------------
            |     7277019.       98713.        74. |    14088210.   155851.        90. |    6811186.        93.6
```

```
Results of Emission Projection for Region  51
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:18 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                     |                  Proj Year = 1990                      |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr     LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr     LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    20474     12043    12043    41.2 |        0        0    24926      4396     4396    82.4 |  -63.5
CHEM MFG    |        0        0    10221      8659     8659    15.3 |        0        0    14812      4364     4364    70.5 |  -49.6
SURF COATG  |        0        0    68649     44623    44623    35.0 |        0        0    85300     25330    25330    70.3 |  -43.2
FUEL COMB   |        0        0     4906      4906     4906     0.0 |        0        0     5817      5817     5817     0.0 |   18.6
SOLV PURCH  |        0        0   115263    115263   115263     0.0 |        0        0   164611    164611   164611     0.0 |   42.8
MISC        |        0        0    14851      6931     6931    53.3 |        0        0    21267      6914     6914    67.5 |   -0.3
-----------------------------------------------------------------------------------------------------------------------------
            |        0        0   234364    192425   192425    17.9 |        0        0   316733    211433   211433    33.2 |    9.9
```

```
Results of Cost Analysis for Region 51
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:18 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |          Proj Year = 1990           |
ID          |         Cost      Emis Red   Cost Eff |         Cost  Emis Red   Cost Eff |     Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------
PETROLEUM   |    18521100.        8431.      2197. |    51396410.    20530.      2503. |   32875310.       177.5
CHEM MFG    |      102568.        1562.        66. |     1402573.    10448.       134. |    1300005.      1267.5
SURF COATG  |     7347002.       24026.       306. |    23298240.    59970.       389. |   15951240.       217.1
FUEL COMB   |           0.           0.         0. |           0.        0.         0. |          0.         0.0
SOLV PURCH  |           0.           0.         0. |           0.        0.         0. |          0.         0.0
MISC        |       87912.        7920.        11. |      535569.    14353.        37. |     447657.       509.2
-------------------------------------------------------------------------------------------------------
            |    26058580.       41939.       621. |    76632790.   105301.       728. |   50574210.       194.1
```

```
Results of Emission Projection for Region  52
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:19 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                    |                  Proj Year = 1990                     |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    18750    16983        0         0    16983    9.4 |    14724    10305        0         0    10305   30.0 |  -39.3
CHEM MFG    |       10        0        0         0        0  100.0 |       10        0        0         0        0  100.0 |    0.0
FUEL COMB   |    12318    12318        0         0    12318    0.0 |    11648    11648        0         0    11648    0.0 |   -5.4
SOLV PURCH  |     1102     1102        0         0     1102    0.0 |     1533     1533        0         0     1533    0.0 |   39.1
MISC        |     1552     1552        0         0     1552    0.0 |     2019     1876        0         0     1876    7.1 |   20.9
-------------------------------------------------------------------------------------------------------------------------------
            |    33732    31955        0         0    31955    5.3 |    29933    25362        0         0    25362   15.3 |  -20.6
```

```
Results of Cost Analysis for Region 52
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:19 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |           Proj Year = 1990            |
ID          |         Cost     Emis Red    Cost Eff |         Cost     Emis Red    Cost Eff |      Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |     2483699.        1767.       1406. |     2059376.        4419.        466. |    -424323.       -17.1
CHEM MFG    |        -150.          10.          0. |        -144.          10.          0. |          6.         0.0
FUEL COMB   |           0.           0.          0. |           0.           0.          0. |          0.         0.0
SOLV PURCH  |           0.           0.          0. |           0.           0.          0. |          0.         0.0
MISC        |           0.           0.          0. |       31670.         143.        222. |      31670.         0.0
------------------------------------------------------------------------------------------------------------
            |     2483549.        1777.       1398. |     2090902.        4571.        457. |    -392647.       -15.8
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:19 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                    |                  Proj Year = 1990                     |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826    850400  1269531   84.6 |  2670562   345599  7088810    387544   733143   92.5 |  -42.3
CHEM MFG    |  9029663   422308  6814311    668432  1090740   93.1 | 13333606   627119 10112627    301174   928293   96.0 |  -14.9
SURF COATG  |  1408711   394641  1728687   1210559  1605200   48.8 |  2137227   613886  2483296    691557  1305443   71.7 |  -18.7
FUEL COMB   |   649795   607706   442590    433741  1041447    4.7 |   703545   652202   496248    480125  1132327    5.6 |    8.7
SOLV PURCH  |  1355797  1355797  3240896   3240896  4596693    0.0 |  2101400  2101400  4877878   4877878  6979278    0.0 |   51.8
MISC        |   439043   281284   993342    342087   623371   56.5 |   592984   357383  1255735    241905   599288   67.6 |   -3.9
-------------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652   6746115 10226982   70.2 | 21539326  4697590 26314594   6980182 11677772   75.6 |   14.2
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:19 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |           Proj Year = 1990            |
ID          |         Cost     Emis Red    Cost Eff |         Cost     Emis Red    Cost Eff |      Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |  6192942000.     6988221.        886. | 14258960000.     9026229.       1580. |  8066020000.       130.2
CHEM MFG    |  4374478000.    14753230.        297. |  6724213000.    22517940.        299. |  2349735000.        53.7
SURF COATG  |   352367600.     1532198.        230. |   900893600.     3315080.        272. |   548526000.       155.7
FUEL COMB   |           0.       50938.          0. |           0.       67467.          0. |           0.         0.0
SOLV PURCH  |           0.           0.          0. |           0.           0.          0. |           0.         0.0
MISC        |   214639400.      809014.        265. |   331866600.     1249432.        266. |   117227200.        54.6
------------------------------------------------------------------------------------------------------------
            | 11134430000.    24133600.        461. | 22215930000.    36176150.        614. | 11081500000.        99.5
```

```
Results of Emission Projection for Region  1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:19 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                   |                   Proj Year = 1995                   |
ID         |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |         0         0     32766     25804     25804  21.2 |         0         0     35660     13112     13112  63.2 |  -49.2
CHEM MFG   |         0         0    432570     24913     24913  94.2 |         0         0    678866       726       726  99.9 |  -97.1
SURF COATG |         0         0      2896      2050      2050  29.2 |         0         0      4908       951       951  80.6 |  -53.6
FUEL COMB  |         0         0     20614     20614     20614   0.0 |         0         0     24055     24055     24055   0.0 |   16.7
SOLV PURCH |         0         0     80407     80407     80407   0.0 |         0         0    151286    151286    151286   0.0 |   88.2
MISC       |         0         0     23980     16441     16441  31.4 |         0         0     32396     11755     11755  63.7 |  -28.5
---------------------------------------------------------------------------------------------------------------------------
           |         0         0    593233    170229    170229  71.3 |         0         0    927171    201886    201886  78.2 |   18.6


Results of Cost Analysis for Region 1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:19 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980           |           Proj Year = 1995           |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |   10315390.       6962.       1482. |   16380940.      22548.        726. |     6065552.        58.8
CHEM MFG   |   -6094305.     407657.          0. |   -9351617.     678140.          0. |    -3257312.         0.0
SURF COATG |     192042.        846.        227. |     921680.       3956.        233. |      729638.       379.9
FUEL COMB  |          0.          0.          0. |          0.          0.          0. |          0.          0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |          0.          0.0
MISC       |    1770546.       7539.        235. |    4743674.      20641.        230. |     2973128.       167.9
---------------------------------------------------------------------------------------------------------------
           |    6183668.     423004.         15. |   12694670.     725285.         18. |     6511005.       105.3


Results of Emission Projection for Region  3
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:19 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                   |                   Proj Year = 1995                   |
ID         |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |       925       640      3386       961      1601  62.9 |      1632       667      6155       187       854  89.0 |  -46.7
CHEM MFG   |      2931       494       791       790      1284  65.5 |      3958       669      1493       238       907  83.4 |  -29.4
SURF COATG |       645       645      2877      2877      3522   0.0 |      1528      1089      6813       741      1830  78.1 |  -48.0
FUEL COMB  |      3556      3556      5963      5963      9519   0.0 |      5338      5338      8674      8674     14012   0.0 |   47.2
SOLV PURCH |      8473      8473     16447     16447     24920   0.0 |     19179     19179     37229     37229     56408   0.0 |  126.4
MISC       |       140       140        84        84       224   0.0 |       205       205       170        63       268  28.5 |   19.9
---------------------------------------------------------------------------------------------------------------------------
           |     16670     13948     29548     27122     41070  11.1 |     31841     27148     60535     47132     74280  19.6 |   80.9


Results of Cost Analysis for Region 3
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:19 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980           |           Proj Year = 1995           |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |    4115109.       2710.       1518. |   15752530.       6933.       2272. |    11637420.       282.8
CHEM MFG   |     -36333.       2438.          0. |     192335.       4544.         42. |      228668.         0.0
SURF COATG |          0.          0.          0. |    5712207.       6511.        877. |     5712207.         0.0
FUEL COMB  |          0.          0.          0. |          0.          0.          0. |          0.          0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |          0.          0.0
MISC       |          0.          0.          0. |      23730.        107.        222. |       23730.         0.0
---------------------------------------------------------------------------------------------------------------
           |    4078776.       5148.        792. |   21680800.      18096.       1198. |    17602020.       431.6
```

```
Results of Emission Projection for Region  4
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:20 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0  %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat    |              Base Year = 1980                    |              Proj Year = 1995                    |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     8594     1488      300       37     1525  82.9 |     7911      875      367       50      924  88.8 |  -39.4
CHEM MFG   |    15716     7805    10350      153     7958  69.5 |    29419    13677    22768       34    13711  73.7 |   72.3
SURF COATG |     1383     1383      130      130     1513   0.0 |     2782     2774      261       61     2835   6.9 |   87.4
FUEL COMB  |    11914    11914      229      229    12143   0.0 |    13933    13933      262      262    14195   0.0 |   16.9
SOLV PURCH |    64229    64229     1311     1311    65540   0.0 |   125700   125700     2566     2566   128266   0.0 |   95.7
MISC       |     8071     1880        0        0     1880  76.7 |    17436     3102        0        0     3102  82.2 |   65.0
---------------------------------------------------------------------------------------------------------------------------
           |   109907    88699    12320     1860    90559  25.9 |   197182   160061    26224     2972   163033  27.0 |   80.0


Results of Cost Analysis for Region 4
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:20 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0  %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |          Proj Year = 1995            |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg  Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM  |    16630290.      7369.      2257. |    15693500.      7354.      2134. |    -936790.      -5.6
CHEM MFG   |     1081718.     18108.        60. |     1665605.     38476.        43. |     583887.      54.0
SURF COATG |           0.         0.         0. |       45175.       209.       216. |      45175.       0.0
FUEL COMB  |           0.         0.         0. |           0.         0.         0. |          0.       0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |          0.       0.0
MISC       |     1374402.      6191.       222. |     3182103.     14334.       222. |    1807701.     131.5
---------------------------------------------------------------------------------------------------------
           |    19086410.     31668.       603. |    20586380.     60373.       341. |    1499970.       7.9


Results of Emission Projection for Region  5
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:20 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0  %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat    |              Base Year = 1980                    |              Proj Year = 1995                    |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0   935714   196609   196609  79.0 |        0        0  1271834    66709    66709  94.8 |  -66.1
CHEM MFG   |        0        0    34451    23334    23334  32.3 |        0        0    63735     5278     5278  91.7 |  -77.4
SURF COATG |        0        0   191901   127669   127669  33.5 |        0        0   372326    52234    52234  86.0 |  -59.1
FUEL COMB  |        0        0    48125    46406    46406   3.6 |        0        0    63023    60322    60322   4.3 |   30.0
SOLV PURCH |        0        0   426532   426532   426532   0.0 |        0        0   845626   845626   845626   0.0 |   98.3
MISC       |        0        0   189824    27657    27657  85.4 |        0        0   292253    23032    23032  92.1 |  -16.7
---------------------------------------------------------------------------------------------------------------------------
           |        0        0  1826547   848207   848207  53.6 |        0        0  2908796  1053201  1053201  63.8 |   24.2


Results of Cost Analysis for Region 5
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:20 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0  %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |          Proj Year = 1995            |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg  Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM  |   639971300.    739105.       866. |  2223651000.   1205125.      1845. | 1583679000.     247.5
CHEM MFG   |     1505059.     11117.       135. |     6180060.     58457.       106. |    4675001.     310.6
SURF COATG |    32424240.     64232.       505. |   154910800.    320092.       484. |  122486600.     377.8
FUEL COMB  |           0.      1719.         0. |           0.      2701.         0. |          0.       0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |          0.       0.0
MISC       |    35980550.    162167.       222. |    60921520.    269221.       226. |   24940980.      69.3
---------------------------------------------------------------------------------------------------------
           |   709881200.    978340.       726. |  2445663000.   1855595.      1318. | 1735782000.     244.5
```

```
Results of Emission Projection for Region  6
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:20 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                 |                  Proj Year = 1995                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     2122     1778    12469     1962     3740  74.4 |     3393      701    17511      991     1692  91.9 |   -54.7
CHEM MFG    |     5657     3414     3221     1521     4935  44.4 |    16123    10692     6191      317    11009  50.7 |   123.1
SURF COATG  |      483      483     6997     6430     6913   7.6 |      729      662    10556     3025     3687  67.3 |   -46.7
FUEL COMB   |     4200     3583     3829     3658     7241   9.8 |     6027     5011     5321     4579     9590  15.5 |    32.4
SOLV PURCH  |    16741    16741    19652    19652    36393   0.0 |    36556    36556    42912    42912    79468   0.0 |   118.4
MISC        |     3870     2963      999      999     3962  18.6 |     6558     5414     1741      868     6281  24.3 |    58.5
-------------------------------------------------------------------------------------------------------------------------
            |    33073    28962    47167    34222    63184  21.3 |    69386    59036    84232    52692   111728  27.3 |    76.8
```

```
Results of Cost Analysis for Region 6
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:20 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 1995           |
ID          |        Cost   Emis Red   Cost Eff  |         Cost   Emis Red   Cost Eff  |      Abs Chg   Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |    9759443.     10851.      899.   |    34272700.     19211.     1784.   |    24513250.      251.2
CHEM MFG    |     493911.      3943.      125.   |     1767265.     11305.      156.   |     1273354.      257.8
SURF COATG  |     128709.       567.      227.   |     2038725.      7597.      268.   |     1910016.     1484.0
FUEL COMB   |          0.       788.        0.   |           0.      1758.        0.   |           0.        0.0
SOLV PURCH  |          0.         0.        0.   |           0.        -0.        0.   |           0.        0.0
MISC        |     438954.       907.      484.   |      975405.      2018.      483.   |      536451.      122.2
----------------------------------------------------------------------------------------------------------
            |   10821020.     17056.      634.   |    39054090.     41889.      932.   |    28233070.      260.9
```

```
Results of Emission Projection for Region  7
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:21 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                 |                  Proj Year = 1995                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0     3047      995      995  67.3 |        0        0     4946      113      113  97.7 |   -88.7
CHEM MFG    |        0        0    11761     3327     3327  71.7 |        0        0    23986      516      516  97.9 |   -84.5
SURF COATG  |        0        0    53122    36053    36053  32.1 |        0        0    84936    10610    10610  87.5 |   -70.6
FUEL COMB   |        0        0      565      565      565   0.0 |        0        0      888      888      888   0.0 |    57.3
SOLV PURCH  |        0        0   100324   100324   100324   0.0 |        0        0   178264   178264   178264   0.0 |    77.7
MISC        |        0        0     4256     3046     3046  28.4 |        0        0     5111     1171     1171  77.1 |   -61.6
-------------------------------------------------------------------------------------------------------------------------
            |        0        0   173075   144310   144310  16.6 |        0        0   298132   191562   191562  35.7 |    32.7
```

```
Results of Cost Analysis for Region 7
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:21 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 1995           |
ID          |        Cost   Emis Red   Cost Eff  |         Cost   Emis Red   Cost Eff  |      Abs Chg   Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |     983585.      2052.      479.   |     2577814.      4833.      533.   |     1594229.      162.1
CHEM MFG    |    1388580.      8434.      165.   |     4274729.     23471.      182.   |     2886149.      207.8
SURF COATG  |    4706528.     17069.      276.   |    16708470.     74325.      225.   |    12001940.      255.0
FUEL COMB   |          0.         0.        0.   |           0.         0.        0.   |           0.        0.0
SOLV PURCH  |          0.         0.        0.   |           0.         0.        0.   |           0.        0.0
MISC        |     119596.      1210.       99.   |      491361.      3941.      125.   |      371765.      310.9
----------------------------------------------------------------------------------------------------------
            |    7198289.     28765.      250.   |    24052370.    106570.      226.   |    16854080.      234.1
```

```
Results of Emission Projection for Region  8
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:21 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                  |                 Proj Year = 1995                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      192       40    14942     7000     7040  53.5 |      250       30    17773     3254     3285  81.8 |  -53.3
CHEM MFG    |     8825      809   312904     4190     4999  98.4 |    11665     1075   482704      429     1504  99.7 |  -69.9
SURF COATG  |        0        0    47712    12965    12965  72.8 |        0        0    90187     5162     5162  94.3 |  -60.2
FUEL COMB   |       57       57      176      176      233   0.0 |       78       78      261      261      339   0.0 |   45.6
SOLV PURCH  |      517      517    12402    12402    12919   0.0 |      926      926    22212    22212    23138   0.0 |   79.1
MISC        |      112      112    75436      342      454  99.4 |      134      134   118272       87      220  99.8 |  -51.4
------------------------------------------------------------------------------------------------------------------------------
            |     9703     1535   463572    37075    38610  91.8 |    13052     2243   731410    31405    33648  95.5 |  -12.9
```

```
Results of Cost Analysis for Region 8
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:21 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980             |        Proj Year = 1995             |
ID          |         Cost   Emis Red   Cost Eff  |         Cost   Emis Red   Cost Eff  |      Abs Chg  Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |    18867110.      8094.      2331.  |    51146780.     14738.      3470.  |    32279670.     171.1
CHEM MFG    |    -4129055.    316730.         0.  |    -3094992.    492866.         0.  |     1034064.       0.0
SURF COATG  |     7887569.     34747.       227.  |    19293950.     85025.       227.  |    11406380.     144.6
FUEL COMB   |           0.         0.         0.  |           0.         0.         0.  |           0.       0.0
SOLV PURCH  |           0.         0.         0.  |           0.        -0.         0.  |           0.       0.0
MISC        |    10776760.     75094.       144.  |    16925690.    118185.       143.  |     6148922.      57.1
----------------------------------------------------------------------------------------------------------
            |    33402390.    434665.        77.  |    84271420.    710814.       119.  |    50869030.     152.3
```

```
Results of Emission Projection for Region  9
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:21 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                  |                 Proj Year = 1995                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0      210       21       21  90.0 |        0        0      228       10       10  95.7 |  -53.5
SURF COATG  |        0        0      171      150      150  12.3 |        0        0      258       49       49  81.0 |  -67.3
FUEL COMB   |        0        0       37       37       37   0.0 |        0        0       45       45       45   0.0 |   22.9
SOLV PURCH  |        0        0     5182     5182     5182   0.0 |        0        0     8599     8599     8599   0.0 |   65.9
MISC        |        0        0      758      758      758   0.0 |        0        0     1177      363      363  69.1 |  -52.1
------------------------------------------------------------------------------------------------------------------------------
            |        0        0     6358     6148     6148   3.3 |        0        0    10308     9066     9066  12.0 |   47.5
```

```
Results of Cost Analysis for Region 9
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:21 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980             |        Proj Year = 1995             |
ID          |         Cost   Emis Red   Cost Eff  |         Cost   Emis Red   Cost Eff  |      Abs Chg  Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |       69552.       189.       368.  |       80273.       218.       368.  |       10721.      15.4
SURF COATG  |        7398.        21.       352.  |      147284.       209.       705.  |      139886.    1890.9
FUEL COMB   |           0.         0.         0.  |           0.         0.         0.  |           0.       0.0
SOLV PURCH  |           0.         0.         0.  |           0.         0.         0.  |           0.       0.0
MISC        |           0.         0.         0.  |      180704.       814.       222.  |      180704.       0.0
----------------------------------------------------------------------------------------------------------
            |       76950.       210.       366.  |      408260.      1241.       329.  |      331310.     430.6
```

```
Results of Emission Projection for Region  10
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:22 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                   Proj Year = 1995                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1274     1103     5211     4679     5782  10.8 |     2073     1592     8372      594     2186  79.1 |  -62.2
CHEM MFG    |        0        0     3032     3030     3030   0.1 |        0        0     6511      643      643  90.1 |  -78.8
SURF COATG  |      908      908     8633     7931     8839   7.4 |     1786     1564    16802     3749     5313  71.4 |  -39.9
FUEL COMB   |     2661     2661     1036     1036     3697   0.0 |     3902     3902     1497     1497     5398   0.0 |   46.0
SOLV PURCH  |    24556    24556    87063    87063   111619   0.0 |    54775    54775   194203   194203   248978   0.0 |  123.1
MISC        |        0        0     1204      135      135  88.8 |        0        0     2229      201      201  91.0 |   49.2
------------------------------------------------------------------------------------------------------------------------------
            |    29399    29228   106179   103874   133102   1.8 |    62535    61833   229614   200887   262719  10.1 |   97.4
```

```
Results of Cost Analysis for Region 10
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:22 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 1995          |
ID          |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM   |     1638693.       703.      2331. |     5506111.      8258.       667. |     3867418.      236.0
CHEM MFG    |         -30.         2.         0. |     1301900.      5869.       222. |     1301930.        0.0
SURF COATG  |      159354.       702.       227. |     3107822.     13275.       234. |     2948468.     1850.3
FUEL COMB   |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH  |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC        |      194214.      1069.       182. |      377761.      2028.       186. |      183547.       94.5
---------------------------------------------------------------------------------------------------------
            |     1992231.      2476.       805. |    10293590.     29430.       350. |     8301362.      416.7
```

```
Results of Emission Projection for Region  11
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:22 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                   Proj Year = 1995                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    20368     3222     3222  84.2 |        0        0    26145      946      946  96.4 |  -70.6
CHEM MFG    |        0        0     5541     1505     1505  72.8 |        0        0     9972      251      251  97.5 |  -83.3
SURF COATG  |        0        0    15742    15588    15588   1.0 |        0        0    29089     7378     7378  74.6 |  -52.7
FUEL COMB   |        0        0     9449     9449     9449   0.0 |        0        0    14084    14084    14084   0.0 |   49.1
SOLV PURCH  |        0        0   121011   121011   121011   0.0 |        0        0   220268   220268   220268   0.0 |   82.0
MISC        |        0        0    15388     1507     1507  90.2 |        0        0    20412     1019     1019  95.0 |  -32.4
------------------------------------------------------------------------------------------------------------------------------
            |        0        0   187499   152282   152282  18.8 |        0        0   319970   243946   243946  23.8 |   60.2
```

```
Results of Cost Analysis for Region 11
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:22 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 1995          |
ID          |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM   |    10091110.     17146.       589. |    39803040.     25199.      1580. |    29711930.      294.4
CHEM MFG    |      490829.      4036.       122. |     2516948.      9721.       259. |     2026119.      412.8
SURF COATG  |       34958.       154.       227. |     4928386.     21711.       227. |     4893428.    13998.0
FUEL COMB   |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH  |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC        |     3023910.     13881.       218. |     4204574.     19393.       217. |     1180664.       39.0
---------------------------------------------------------------------------------------------------------
            |    13640810.     35217.       387. |    51452950.     76024.       677. |    37812140.      277.2
```

```
Results of Emission Projection for Region  13
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:22 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                  |                 Proj Year = 1995                   |
ID         | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      599      599         0         0      599   0.0 |      757      379         0         0      379  49.9 |  -36.7
CHEM MFG   |      236      236         0         0      236   0.0 |      482      482         0         0      482   0.0 |  104.0
FUEL COMB  |     1551     1551         0         0     1551   0.0 |     2190     2190         0         0     2190   0.0 |   41.2
SOLV PURCH |    12392    12392         0         0    12392   0.0 |    24012    24012         0         0    24012   0.0 |   93.8
MISC       |     3000     3000         0         0     3000   0.0 |     4237     4237         0         0     4237   0.0 |   41.2
------------------------------------------------------------------------------------------------------------------------------
           |    17778    17778         0         0    17778   0.0 |    31678    31300         0         0    31300   1.2 |   76.1
```

```
Results of Cost Analysis for Region 13
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:22 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980            |           Proj Year = 1995              |
ID         |         Cost     Emis Red    Cost Eff |          Cost   Emis Red     Cost Eff  |        Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |           0.           0.          0. |       -55588.       378.           0.  |       -55588.         0.0
CHEM MFG   |           0.           0.          0. |            0.         0.           0.  |            0.         0.0
FUEL COMB  |           0.           0.          0. |            0.         0.           0.  |            0.         0.0
SOLV PURCH |           0.           0.          0. |            0.         0.           0.  |            0.         0.0
MISC       |           0.           0.          0. |            0.         0.           0.  |            0.         0.0
--------------------------------------------------------------------------------------------------------------
           |           0.           0.          0. |       -55588.       378.           0.  |       -55588.         0.0
```

```
Results of Emission Projection for Region  14
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:23 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                  |                 Proj Year = 1995                   |
ID         | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0    224238     46435    46435  79.3 |        0        0    284419     12555    12555  95.6 |  -73.0
CHEM MFG   |        0        0     52015     13660    13660  73.7 |        0        0     86984      3755     3755  95.7 |  -72.5
SURF COATG |        0        0    180144    132027   132027  26.7 |        0        0    262988     47433    47433  82.0 |  -64.1
FUEL COMB  |        0        0      6899      6899     6899   0.0 |        0        0      7361      7361     7361   0.0 |    6.7
SOLV PURCH |        0        0    246769    246769   246769   0.0 |        0        0    361336    361336   361336   0.0 |   46.4
MISC       |        0        0     48734      9809     9809  79.9 |        0        0     45055      3001     3001  93.3 |  -69.4
------------------------------------------------------------------------------------------------------------------------------
           |        0        0    758799    455599   455599  40.0 |        0        0   1048143    435440   435440  58.5 |   -4.4
```

```
Results of Cost Analysis for Region 14
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:23 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980            |           Proj Year = 1995              |
ID         |         Cost     Emis Red    Cost Eff |          Cost   Emis Red     Cost Eff  |        Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |   384486600.      177803.       2162. |   1100737000.    271864.        4049.  |    716250400.       186.3
CHEM MFG   |     5529080.       38355.        144. |     19047060.     83230.         229.  |     13517980.       244.5
SURF COATG |     8659682.       48117.        180. |     59584940.    215555.         276.  |     50925260.       588.1
FUEL COMB  |           0.           0.          0. |            0.         0.           0.  |            0.         0.0
SOLV PURCH |           0.           0.          0. |            0.         0.           0.  |            0.         0.0
MISC       |     8638698.       38925.        222. |      9220209.     42055.         219.  |       581511.         6.7
--------------------------------------------------------------------------------------------------------------
           |   407314000.      303200.       1343. |   1188589000.    612703.        1940.  |    781275100.       191.8
```

```
Results of Emission Projection for Region  15
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:23 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                  Proj Year = 1995                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   156517    11491     3781     2322    13813  91.4 |   188501    10058     4532      497    10555  94.5 |  -23.6
CHEM MFG    |   267841    12558   718440     7996    20554  97.9 |   376546    17646  1026860     2982    20628  98.5 |    0.4
SURF COATG  |   232564    51084     7519     4378    55462  76.9 |   386969    82652    11910     1244    83896  79.0 |   51.3
FUEL COMB   |    10890    10866      308      308    11174   0.2 |    12302    12262      455      454    12715   0.3 |   13.8
SOLV PURCH  |   152202   152202    20755    20755   172957   0.0 |   263401   263401    35919    35919   299320   0.0 |   73.1
MISC        |    29461    16165      561      280    16445  45.2 |    43589    10285      798      117    10403  76.6 |  -36.7
------------------------------------------------------------------------------------------------------------------------
            |   849475   254366   751364    36039   290405  81.9 |  1271309   396304  1080474    41213   437517  81.4 |   50.7
```

```
Results of Cost Analysis for Region 15
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:23 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |          Proj Year = 1995           |
ID          |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |    89383120.    146485.       610. |   113231700.    182478.       621. |    23848590.       26.7
CHEM MFG    |   -46995860.    965727.         0. |   -57867620.   1382779.         0. |   -10871750.        0.0
SURF COATG  |    41104740.    184621.       223. |    77793150.    314983.       247. |    36688410.       89.3
FUEL COMB   |           0.        24.         0. |           0.        42.         0. |           0.        0.0
SOLV PURCH  |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC        |     3012096.     13577.       222. |     7541847.     33985.       222. |     4529751.      150.4
-----------------------------------------------------------------------------------------------------------
            |    86504100.   1310434.        66. |   140699100.   1914266.        74. |    54194990.       62.7
```

```
Results of Emission Projection for Region  16
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:23 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                  Proj Year = 1995                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      111      111        0        0      111   0.0 |      118       63        0        0       63  46.0 |  -42.8
CHEM MFG    |   108754    24323        0        0    24323  77.6 |   199565    39067        0        0    39067  80.4 |   60.6
SURF COATG  |     3661     3549        0        0     3549   3.1 |     5466     4121        0        0     4121  24.6 |   16.1
FUEL COMB   |     5475     5475        0        0     5475   0.0 |     5619     5619        0        0     5619   0.0 |    2.6
SOLV PURCH  |    68776    68776        0        0    68776   0.0 |   102542   102542        0        0   102542   0.0 |   49.1
MISC        |      788      738        0        0      738   6.3 |     1021      944        0        0      944   7.6 |   27.8
------------------------------------------------------------------------------------------------------------------------
            |   187565   102972        0        0   102972  45.1 |   314330   152356        0        0   152356  51.5 |   48.0
```

```
Results of Cost Analysis for Region 16
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:23 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |          Proj Year = 1995           |
ID          |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |           0.         0.         0. |       12183.        54.       225. |       12183.        0.0
CHEM MFG    |    -1048219.     84431.         0. |    -1791379.    160498.         0. |     -743160.        0.0
SURF COATG  |       25424.       112.       227. |      125656.      1345.        93. |      100232.      394.2
FUEL COMB   |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH  |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC        |       11364.        50.       227. |       17462.        77.       226. |        6098.       53.7
-----------------------------------------------------------------------------------------------------------
            |    -1011431.     84593.         0. |    -1636077.    161974.         0. |     -624646.        0.0
```

```
Results of Emission Projection for Region  17
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:24 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                 Proj Year = 1995                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   216620    22611     8215     4282    26893  88.0 |   294065    22662    10704     1112    23774  92.2 |  -11.6
CHEM MFG   |     3745     3745       43       43     3788   0.0 |     6542     6484       71       14     6498   1.7 |   71.5
SURF COATG |     2651     2651     2743     2743     5394   0.0 |     4400     3407     4407     1276     4683  46.8 |  -13.2
FUEL COMB  |    79920    79920     4659     4659    84579   0.0 |    81840    81840     4765     4765    86604   0.0 |    2.4
SOLV PURCH |    35310    35310     4364     4364    39674   0.0 |    63181    63181     7809     7809    70990   0.0 |   78.9
MISC       |      328      328     1472     1472     1800   0.0 |      475      475     2239     2043     2518   7.2 |   39.9
-------------------------------------------------------------------------------------------------------------------------
           |   338574   144565    21496    17563   162128  55.0 |   450502   178049    29995    17018   195067  59.4 |   20.3
```

```
Results of Cost Analysis for Region 17
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:24 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |            Base Year = 1980            |            Proj Year = 1995             |
ID         |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |   461402800.     197942.       2331. |   633300700.     280994.       2254. |   171897900.        37.3
CHEM MFG   |           0.          0.          0. |      157834.        115.       1378. |      157834.         0.0
SURF COATG |           0.          0.          0. |     1040315.       4124.        252. |     1040315.         0.0
FUEL COMB  |           0.          0.          0. |           0.          0.          0. |           0.         0.0
SOLV PURCH |           0.          0.          0. |           0.          0.          0. |           0.         0.0
MISC       |           0.          0.          0. |       43616.        196.        222. |       43616.         0.0
---------------------------------------------------------------------------------------------------------------
           |   461402800.     197942.       2331. |   634542500.     285430.       2223. |   173139700.        37.5
```

```
Results of Emission Projection for Region  18
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:24 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                 Proj Year = 1995                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     1906      573    41135    20019    20592  52.2 |     2702      428    56679     6781     7209  87.9 |  -65.0
CHEM MFG   |     7839     4842   157562    69345    74187  55.1 |    11051     8819   286664    18022    26841  91.0 |  -63.8
SURF COATG |     1776     1662    40529    18404    20066  52.6 |     3025     1319    69593     7147     8466  88.3 |  -57.8
FUEL COMB  |     1822      367     5630     5232     5599  24.9 |     2907      880     6534     5429     6309  33.2 |   12.7
SOLV PURCH |     3533     3533    46945    46945    50478   0.0 |     6147     6147    81680    81680    87827   0.0 |   74.0
MISC       |     2512     1057    19668     6969     8026  63.8 |     4031     1079    30746     7478     8557  75.4 |    6.6
-------------------------------------------------------------------------------------------------------------------------
           |    19388    12034   311469   166914   178948  45.9 |    29863    18672   531896   126538   145210  74.2 |  -18.9
```

```
Results of Cost Analysis for Region 18
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:24 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |            Base Year = 1980            |            Proj Year = 1995             |
ID         |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |    45137620.      22449.       2011. |   136295400.      52172.       2612. |    91157780.       202.0
CHEM MFG   |     3465031.      91214.         38. |    40282180.     270873.        149. |    36817140.      1062.5
SURF COATG |     3892722.      22239.        175. |    18150290.      64152.        283. |    14257570.       366.3
FUEL COMB  |           0.       1853.          0. |           0.       3131.          0. |           0.         0.0
SOLV PURCH |           0.          0.          0. |           0.          0.          0. |           0.         0.0
MISC       |     3150084.      14154.        223. |     6056047.      26220.        231. |     2905963.        92.3
---------------------------------------------------------------------------------------------------------------
           |    55645460.     151909.        366. |   200783900.     416549.        482. |   145138400.       260.8
```

```
Results of Emission Projection for Region  19
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:24 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 1995                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   700999   103958   103958  85.2 |        0        0  1066365    26530    26530  97.5 |  -74.5
CHEM MFG    |        0        0   955331   176474   176474  81.5 |        0        0  2270907    40572    40572  98.2 |  -77.0
SURF COATG  |        0        0    12269    10850    10850  11.6 |        0        0    18173     5190     5190  71.4 |  -52.2
FUEL COMB   |        0        0    36288    31269    31269  13.8 |        0        0    38836    34182    34182  12.0 |    9.3
SOLV PURCH  |        0        0    39957    39957    39957   0.0 |        0        0    63276    63276    63276   0.0 |   58.4
MISC        |        0        0    10728    10212    10212   4.8 |        0        0    16194     4471     4471  72.4 |  -56.2
------------------------------------------------------------------------------------------------------------------------------
            |        0        0  1755572   372720   372720  78.8 |        0        0  3473750   174221   174221  95.0 |  -53.3
```

```
Results of Cost Analysis for Region 19
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:24 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |           Proj Year = 1995            |
ID          |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  1214326000.     597041.      2034. |  4130331000.    1039835.      3972. |  2916005000.      240.1
CHEM MFG    |    71472330.     778857.        92. |   190794600.    2230335.        86. |   119322300.      166.9
SURF COATG  |      322113.       1419.       227. |     2947156.      12983.       227. |     2625043.      814.9
FUEL COMB   |           0.       5019.         0. |           0.       4654.         0. |           0.        0.0
SOLV PURCH  |           0.          0.         0. |           0.          0.         0. |           0.        0.0
MISC        |       95238.        516.       185. |     2574571.      11723.       220. |     2479333.     2603.3
------------------------------------------------------------------------------------------------------------------
            |  1286216000.    1382852.       930. |  4326647000.    3299530.      1311. |  3040432000.      236.4
```

```
Results of Emission Projection for Region  20
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:25 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 1995                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     5828     5600     6133     6133    11733   1.9 |     9427     4956     9778     1372     6328  67.0 |  -46.1
CHEM MFG    |        0        0     2702     2702     2702   0.0 |        0        0     5342      664      664  87.6 |  -75.4
SURF COATG  |      177      177     6900     3630     3807  46.2 |      277      143    10909     1711     1853  83.4 |  -51.3
FUEL COMB   |      573      573      667      667     1240   0.0 |      907      907     1083     1083     1989   0.0 |   60.4
SOLV PURCH  |     7463     7463    13860    13860    21323   0.0 |    13816    13816    25658    25658    39474   0.0 |   85.1
MISC        |      648      648      194      191      839   0.4 |      960      960      371       82     1042  21.7 |   24.2
------------------------------------------------------------------------------------------------------------------------------
            |    14689    14461    30456    27183    41644   7.8 |    25387    20782    53141    30569    51351  34.6 |   23.3
```

```
Results of Cost Analysis for Region 20
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:25 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |           Proj Year = 1995            |
ID          |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      531468.        228.      2331. |     2777887.      12877.       216. |     2246419.      422.7
CHEM MFG    |           0.          0.         0. |     1151845.       4678.       246. |     1151845.        0.0
SURF COATG  |      742290.       3270.       227. |     2518566.       9333.       270. |     1776276.      239.3
FUEL COMB   |           0.          0.         0. |           0.          0.         0. |           0.        0.0
SOLV PURCH  |           0.          0.         0. |           0.          0.         0. |           0.        0.0
MISC        |         258.          3.        86. |       60698.        289.       210. |       60440.    23426.2
------------------------------------------------------------------------------------------------------------------
            |     1274016.       3501.       364. |     6508996.      27177.       240. |     5234980.      410.9
```

```
Results of Emission Projection for Region  21
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:25 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                    Base Year = 1980                     |                    Proj Year = 1995                     |
ID         |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |    %Chg
----------------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    266372     32364         0         0     32364  87.9 |    371701     22980         0         0     22980  93.8 |   -29.0
CHEM MFG   |     69931      3582         0         0      3582  94.9 |    102604      5485         0         0      5485  94.7 |    53.1
SURF COATG |     22226     19548        85        85     19633  12.0 |     28246     19558       104        29     19587  30.9 |    -0.2
FUEL COMB  |      2559      2559        24        24      2583   0.0 |      2973      2973        28        28      3001   0.0 |    16.2
SOLV PURCH |     64450     64450       641       641     65091   0.0 |     98736     98736       982       982     99718   0.0 |    53.2
MISC       |     64555     18928      1454       257     19185  70.9 |     86427     20116      1491       135     20251  77.0 |     5.6
----------------------------------------------------------------------------------------------------------------------------------------
           |    490093    141431      2204      1007    142438  71.1 |    690687    169848      2605      1174    171022  75.3 |    20.1
```

```
Results of Cost Analysis for Region 21
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:25 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980            |           Proj Year = 1995            |
ID         |          Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      5568460.     234008.         24. |      9920850.     348721.         28. |      4352390.        78.2
CHEM MFG   |    116262600.      66349.       1752. |    174682200.      97119.       1799. |     58419630.        50.2
SURF COATG |      1356315.       2678.        506. |      6425135.       8763.        733. |      5068820.       373.7
FUEL COMB  |            0.          0.          0. |            0.          0.          0. |            0.         0.0
SOLV PURCH |            0.          0.          0. |            0.         -0.          0. |            0.         0.0
MISC       |      9935896.      46824.        212. |     14555640.      67667.        215. |      4619740.        46.5
----------------------------------------------------------------------------------------------------------------------
           |    133123300.     349859.        381. |    205583800.     522269.        394. |     72460580.        54.4
```

```
Results of Emission Projection for Region  22
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:25 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                    Base Year = 1980                     |                    Proj Year = 1995                     |
ID         |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |    %Chg
----------------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |         0         0     13399     10197     10197  23.9 |         0         0     18245      1313      1313  92.8 |   -87.1
CHEM MFG   |         0         0      8511      8498      8498   0.2 |         0         0     11776      2107      2107  82.1 |   -75.2
SURF COATG |         0         0     43410     42534     42534   2.0 |         0         0     56435     17983     17983  68.1 |   -57.7
FUEL COMB  |         0         0     30471     30471     30471   0.0 |         0         0     42335     42335     42335   0.0 |    38.9
SOLV PURCH |         0         0    160850    160850    160850   0.0 |         0         0    306947    306947    306947   0.0 |    90.8
MISC       |         0         0     14104     14078     14078   0.2 |         0         0     22325      5844      5844  73.8 |   -58.5
----------------------------------------------------------------------------------------------------------------------------------------
           |         0         0    270745    266628    266628   1.5 |         0         0    458064    376528    376528  17.8 |    41.2
```

```
Results of Cost Analysis for Region 22
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:25 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980            |           Proj Year = 1995            |
ID         |          Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      3317382.       3202.       1036. |     10315940.      16932.        609. |      6998561.       211.0
CHEM MFG   |         2886.         13.        222. |      7960372.       9670.        823. |      7957486.    275727.2
SURF COATG |      -218889.        876.          0. |     21369070.      38452.        556. |     21587960.         0.0
FUEL COMB  |            0.          0.          0. |            0.          0.          0. |            0.         0.0
SOLV PURCH |            0.          0.          0. |            0.          0.          0. |            0.         0.0
MISC       |         4446.         26.        171. |      5735694.      16482.        348. |      5731248.    128908.0
----------------------------------------------------------------------------------------------------------------------
           |      3105825.       4117.        754. |     45381080.      81536.        557. |     42275260.      1361.2
```

```
Results of Emission Projection for Region  23
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:26 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                 |                 Proj Year = 1995                 |
ID         | Unc Attn Ctr Attn  Unc NA  Ctr NA Tot Ctr    LOC | Unc Attn Ctr Attn  Unc NA  Ctr NA Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0  394595   34773   34773   91.2 |        0        0  508997   13285   13285   97.4 |  -61.8
CHEM MFG   |        0        0   34445   34384   34384    0.2 |        0        0   55286    8245    8245   85.1 |  -76.0
SURF COATG |        0        0  145042  135825  135825    6.4 |        0        0  212688   60952   60952   71.3 |  -55.1
FUEL COMB  |        0        0   13960   13960   13960    0.0 |        0        0   14938   14938   14938    0.0 |    7.0
SOLV PURCH |        0        0  261240  261240  261240    0.0 |        0        0  425681  425681  425681    0.0 |   62.9
MISC       |        0        0   36112   23412   23412   35.2 |        0        0   45664   18624   18624   59.2 |  -20.5
-------------------------------------------------------------------------------------------------------------------------
           |        0        0  885394  503594  503594   43.1 |        0        0 1263254  541724  541724   57.1 |    7.6
```

```
Results of Cost Analysis for Region 23
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:26 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1930            |            Proj Year = 1995           |
ID         |         Cost   Emis Red    Cost Eff  |         Cost   Emis Red    Cost Eff   |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |   838745100.    359822.       2331.  |  2279570000.    495712.       4599.   |  1440825000.      171.8
CHEM MFG   |       13542.        61.        222.  |     9896839.     47041.        210.   |     9883297.    72982.5
SURF COATG |     2075429.      9217.        225.  |    50215760.    151737.        331.   |    48140330.     2319.5
FUEL COMB  |           0.         0.          0.  |           0.         0.          0.   |           0.        0.0
SOLV PURCH |           0.         0.          0.  |           0.         0.          0.   |           0.        0.0
MISC       |     3394086.     12700.        267.  |     7239890.     27040.        268.   |     3845804.      113.3
--------------------------------------------------------------------------------------------------------------
           |   844228200.    381800.       2211.  |  2346922000.    721530.       3253.   |  1502694000.      178.0
```

```
Results of Emission Projection for Region  24
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:26 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                 |                 Proj Year = 1995                 |
ID         | Unc Attn Ctr Attn  Unc NA  Ctr NA Tot Ctr    LOC | Unc Attn Ctr Attn  Unc NA  Ctr NA Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    26778    24304       0       0   24304    9.2 |    32433    16664       0       0   16664   48.6 |  -31.4
CHEM MFG   |     2259     2236       0       0    2236    1.0 |     3695     3625       0       0    3625    1.9 |   62.1
SURF COATG |    36824    34337       0       0   34337    6.8 |    67681    56181       0       0   56181   17.0 |   63.6
FUEL COMB  |     5396     5396       0       0    5396    0.0 |     6280     6280       0       0    6280    0.0 |   16.4
SOLV PURCH |    92937    92937       0       0   92937    0.0 |   181307   181307       0       0  181307    0.0 |   95.1
MISC       |     1615     1599       0       0    1599    1.0 |     2522     2497       0       0    2497    1.0 |   56.1
-------------------------------------------------------------------------------------------------------------------------
           |   165809   160809       0       0  160809    3.0 |   293918   266554       0       0  266554    9.3 |   65.8
```

```
Results of Cost Analysis for Region 24
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:26 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |            Proj Year = 1995           |
ID         |         Cost   Emis Red    Cost Eff  |         Cost   Emis Red    Cost Eff   |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |     2816847.      2474.       1139.  |     3729000.     15769.        236.   |      912153.       32.4
CHEM MFG   |        2760.        23.        120.  |       31114.        69.        450.   |       28354.     1027.3
SURF COATG |     -535868.      2487.          0.  |     3192971.     11501.        278.   |     3728839.        0.0
FUEL COMB  |           0.         0.          0.  |           0.         0.          0.   |           0.        0.0
SOLV PURCH |           0.         0.          0.  |           0.         0.          0.   |           0.        0.0
MISC       |           0.        16.          0.  |           0.        26.          0.   |           0.        0.0
--------------------------------------------------------------------------------------------------------------
           |     2283739.      5000.        457.  |     6953084.     27364.        254.   |     4669345.      204.5
```

```
Results of Emission Projection for Region  25
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:26 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                    |                  Proj Year = 1995                     |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    21851    21851        0        0    21851   0.0 |    23972    19229        0        0    19229  19.8 |  -12.0
CHEM MFG    |   109914     2680        0        0     2680  97.6 |   200246     4338        0        0     4338  97.8 |   61.9
SURF COATG  |    10399    10399        0        0    10399   0.0 |    18516    18014        0        0    18014   2.7 |   73.2
FUEL COMB   |    37088    37088        0        0    37088   0.0 |    46981    46981        0        0    46981   0.0 |   26.7
SOLV PURCH  |    57933    57933        0        0    57933   0.0 |   107192   107192        0        0   107192   0.0 |   85.0
MISC        |     4085     4085        0        0     4085   0.0 |     6907     6907        0        0     6907   0.0 |   69.1
------------------------------------------------------------------------------------------------------------------------------
            |   241270   134036        0        0   134036  44.4 |   403814   202662        0        0   202662  49.8 |   51.2


Results of Cost Analysis for Region 25
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:26 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |           Proj Year = 1995           |
ID          |        Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |          0.          0.        0. |     -823567.      4743.         0. |     -823567.        0.0
CHEM MFG    |   -7291011.     107234.        0. |   -11108330.    195908.         0. |    -3817318.        0.0
SURF COATG  |          0.          0.        0. |      104928.       502.       209. |      104928.        0.0
FUEL COMB   |          0.          0.        0. |           0.         0.         0. |           0.        0.0
SOLV PURCH  |          0.          0.        0. |           0.         0.         0. |           0.        0.0
MISC        |          0.          0.        0. |           0.         0.         0. |           0.        0.0
-------------------------------------------------------------------------------------------------------------
            |   -7291011.     107234.        0. |   -11826970.    201153.         0. |    -4535957.        0.0


Results of Emission Projection for Region  26
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:27 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                    |                  Proj Year = 1995                     |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    56190     6224     7202     4618    10842  82.9 |    75421     5811     8613      907     6718  92.0 |  -38.0
CHEM MFG    |    53376    49170       21       21    49191   7.9 |    80503    74514       32        5    74519   7.5 |   51.5
SURF COATG  |   210081    55459    46672    46654   102113  60.2 |   306238   103376    69570     5426   108803  71.0 |    6.6
FUEL COMB   |     2253     2163      441      441     2604   3.3 |     3143     3026      599      574     3601   3.8 |   38.3
SOLV PURCH  |    92524    92524    37792    37792   130316   0.0 |   160937   160937    65736    65736   226673   0.0 |   73.9
MISC        |    42599    11941       66       66    12007  71.9 |    62018    17935       80       29    17964  71.1 |   49.6
------------------------------------------------------------------------------------------------------------------------------
            |   457023   217481    92194    89592   307073  44.1 |   688259   365601   144630    72677   438278  47.4 |   42.7


Results of Cost Analysis for Region 26
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:27 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |           Proj Year = 1995           |
ID          |        Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |  105914600.     52550.     2016. |   147093400.     77316.      1902. |    41178800.       38.9
CHEM MFG    |     125146.      4206.       30. |      199492.      6016.        33. |       74346.       59.4
SURF COATG  |   34307510.    154640.      222. |    47000900.    267005.       176. |    12693390.       37.0
FUEL COMB   |          0.        90.        0. |           0.       141.         0. |           0.        0.0
SOLV PURCH  |          0.         0.        0. |           0.         0.         0. |           0.        0.0
MISC        |    6803634.     30658.      222. |     9791541.     44134.       222. |     2987907.       43.9
-------------------------------------------------------------------------------------------------------------
            |  147150900.    242144.      608. |   204085300.    394611.       517. |    56934430.       38.7
```

```
Results of Emission Projection for Region  27
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:27 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0  %    Retire Rate = 5.0  %    Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat    |             Base Year = 1980                         |             Proj Year = 1995                         |
ID         | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    36087     9381         0         0     9381  74.0 |    48756     8712         0         0     8712  82.1 |    -7.1
CHEM MFG   |      131      131         0         0      131   0.0 |      202      202         0         0      202   0.0 |    53.9
FUEL COMB  |     2632     2632         0         0     2632   0.0 |     2896     2896         0         0     2896   0.0 |    10.0
SOLV PURCH |     5079     5079         0         0     5079   0.0 |     8476     8476         0         0     8476   0.0 |    66.9
MISC       |     1351     1333         0         0     1333   1.3 |     1776     1752         0         0     1752   1.3 |    31.4
---------------------------------------------------------------------------------------------------------------------------
           |    45280    18556         0         0    18556  59.0 |    62105    22038         0         0    22038  64.5 |    18.8
```

```
Results of Cost Analysis for Region 27
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:27 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0  %    Retire Rate = 5.0  %    Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980             |          Proj Year = 1995             |
ID         |         Cost    Emis Red    Cost Eff  |         Cost    Emis Red    Cost Eff  |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |    61795050.      26706.       2314.  |    87603700.      40044.       2188.  |    25808650.        41.8
CHEM MFG   |           0.          0.          0.  |           0.          0.          0.  |           0.         0.0
FUEL COMB  |           0.          0.          0.  |           0.          0.          0.  |           0.         0.0
SOLV PURCH |           0.          0.          0.  |           0.          0.          0.  |           0.         0.0
MISC       |        3996.         18.        222.  |        5254.         24.        222.  |        1258.        31.5
-------------------------------------------------------------------------------------------------------------
           |    61799040.      26724.       2312.  |    87608950.      40068.       2187.  |    25809910.        41.8
```

```
Results of Emission Projection for Region  28
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:27 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0  %    Retire Rate = 5.0  %    Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat    |             Base Year = 1980                         |             Proj Year = 1995                         |
ID         | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      933      933      2387      2330     3263   1.7 |     1088      584      3268       176      760  82.5 |   -76.7
CHEM MFG   |      485      485         0         0      485   0.0 |      713      713         0         0      713   0.0 |    46.9
SURF COATG |    31591    31561     20235      9792    41353  20.2 |    58354    50993     35833      6233    57226  39.2 |    38.4
FUEL COMB  |     2097     2097       481       481     2578   0.0 |     2397     2397       493       493     2890   0.0 |    12.1
SOLV PURCH |    13924    13924      4892      4892    18816   0.0 |    24164    24164      8490      8490    32654   0.0 |    73.5
MISC       |       64       64        10        10       74   0.0 |       89       89        14        11       99   3.5 |    34.1
---------------------------------------------------------------------------------------------------------------------------
           |    49094    49064     28005     17505    66569  13.7 |    86805    78940     48098     15403    94342  30.1 |    41.7
```

```
Results of Cost Analysis for Region 28
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:27 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0  %    Retire Rate = 5.0  %    Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980             |          Proj Year = 1995             |
ID         |         Cost    Emis Red    Cost Eff  |         Cost    Emis Red    Cost Eff  |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |      132867.         57.       2331.  |     -175407.       3596.          0.  |     -308274.      -232.0
CHEM MFG   |           0.          0.          0.  |           0.          0.          0.  |           0.         0.0
SURF COATG |     1725951.      10473.        165.  |     7349975.      36962.        199.  |     5624024.       325.9
FUEL COMB  |           0.          0.          0.  |           0.          0.          0.  |           0.         0.0
SOLV PURCH |           0.          0.          0.  |           0.          0.          0.  |           0.         0.0
MISC       |           0.          0.          0.  |         803.          4.        222.  |         803.         0.0
-------------------------------------------------------------------------------------------------------------
           |     1858818.      10530.        177.  |     7175370.      40561.        177.  |     5316552.       286.0
```

```
Results of Emission Projection for Region  29
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:27 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                 Proj Year = 1995                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      527      527     3980     1686     2213  50.9 |      801      485     7198      242      727  90.9 |  -67.1
SURF COATG  |     1181     1181        0        0     1181   0.0 |     2534     2534        0        0     2534   0.0 |  114.6
FUEL COMB   |       48       48      181      181      229   0.0 |       84       84      298      298      382   0.0 |   66.6
SOLV PURCH  |     1450     1450     1445     1445     2895   0.0 |     3131     3131     3120     3120     6252   0.0 |  115.9
MISC        |        0        0        1        1        1   0.0 |        0        0        1        0        0  65.9 |  -51.8
------------------------------------------------------------------------------------------------------------------------------
            |     3206     3206     5607     3313     6519  26.0 |     6550     6234    10618     3661     9895  42.4 |   51.8
```

```
Results of Cost Analysis for Region 29
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:27 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980           |         Proj Year = 1995           |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |     Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |    1329053.      2294.       579. |    3585094.      7272.       493. |    2256041.      169.7
SURF COATG  |          0.         0.         0. |          0.         0.         0. |          0.        0.0
FUEL COMB   |          0.         0.         0. |          0.         0.         0. |          0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |          0.        0.0
MISC        |          0.         0.         0. |        207.         1.       222. |        207.        0.0
--------------------------------------------------------------------------------------------------------------
            |    1329053.      2294.       579. |    3585301.      7273.       493. |    2256248.      169.8
```

```
Results of Emission Projection for Region  30
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:28 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                 Proj Year = 1995                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    59410     3846     3846  93.5 |        0        0   113595      827      827  99.3 |  -78.5
CHEM MFG    |        0        0      526      526      526   0.0 |        0        0     1095      112      112  89.7 |  -78.7
SURF COATG  |        0        0    21951    14618    14618  33.4 |        0        0    41517     6549     6549  84.2 |  -55.2
FUEL COMB   |        0        0      241      241      241   0.0 |        0        0      428      428      428   0.0 |   77.7
SOLV PURCH  |        0        0    27436    27436    27436   0.0 |        0        0    60400    60400    60400   0.0 |  120.1
MISC        |        0        0      632      632      632   0.0 |        0        0     1188      832      832  30.0 |   31.6
------------------------------------------------------------------------------------------------------------------------------
            |        0        0   110196    47299    47299  57.1 |        0        0   218223    69148    69148  68.3 |   46.2
```

```
Results of Cost Analysis for Region 30
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:28 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980           |         Proj Year = 1995           |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |     Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |  122062900.     55564.      2197. |  494795600.    112768.      4388. |  372732600.      305.4
CHEM MFG    |          0.         0.         0. |     218097.       982.       222. |     218097.        0.0
SURF COATG  |    3768585.      7333.       514. |   15302060.     34968.       438. |   11533470.      306.0
FUEL COMB   |          0.         0.         0. |          0.         0.         0. |          0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |          0.        0.0
MISC        |          0.         0.         0. |      94156.       357.       264. |      94156.        0.0
--------------------------------------------------------------------------------------------------------------
            |  125831500.     62897.      2001. |  510409900.    149075.      3424. |  384578400.      305.6
```

```
Results of Emission Projection for Region  31
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:28 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                  |                   Proj Year = 1995                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   408286    48137    48137  88.2 |        0        0   489732    18466    18466  96.2 |  -61.6
CHEM MFG    |        0        0   147127    21362    21362  85.5 |        0        0   239160     2400     2400  99.0 |  -88.8
SURF COATG  |        0        0    16779     9921     9921  40.9 |        0        0    26352     4101     4101  84.4 |  -58.7
FUEL COMB   |        0        0     8262     8160     8160   1.2 |        0        0    12658    12557    12557   0.8 |   53.9
SOLV PURCH  |        0        0   200270   200270   200270   0.0 |        0        0   338017   338017   338017   0.0 |   68.8
MISC        |        0        0   250278    67189    67189  73.2 |        0        0   340289    23149    23149  93.2 |  -65.5
-----------------------------------------------------------------------------------------------------------------------------
            |        0        0  1031002   355039   355039  65.6 |        0        0  1446208   398690   398690  72.4 |   12.3
```

```
Results of Cost Analysis for Region 31
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:28 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980              |         Proj Year = 1995              |
ID          |         Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |   456773800.     360149.       1268. |   1164277000.     471265.       2471. |   707503400.      154.9
CHEM MFG    |     1302154.     125765.         10. |     10362240.     236760.         44. |     9060088.      695.8
SURF COATG  |     1572060.       6858.        229. |      4852625.      22251.        218. |     3280565.      208.7
FUEL COMB   |           0.        102.          0. |            0.        101.          0. |           0.        0.0
SOLV PURCH  |           0.          0.          0. |            0.          0.          0. |           0.        0.0
MISC        |    82684060.     183089.        452. |    138189300.     317140.        436. |    55505240.       67.1
--------------------------------------------------------------------------------------------------------------
            |   542332000.     675963.        802. |   1317681000.    1047518.       1258. |   775349200.      143.0
```

```
Results of Emission Projection for Region  32
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:28 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                  |                   Proj Year = 1995                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     9147     5195    23790    23790    28985  12.0 |    12904     3899    42106     1725     5624  89.8 |  -80.6
SURF COATG  |      350        7        0        0        7  98.0 |      629       13        0        0       13  98.0 |   79.8
FUEL COMB   |    22641    22641       47       47    22688   0.0 |    23918    23918       83       83    24002   0.0 |    5.8
SOLV PURCH  |     4603     4603     3921     3921     8524   0.0 |     9894     9894     8428     8428    18322   0.0 |  115.0
MISC        |      677      677        5        5      682   0.0 |     1037     1037        7        2     1040   0.5 |   52.5
-----------------------------------------------------------------------------------------------------------------------------
            |    37418    33123    27763    27763    60886   6.6 |    48383    38761    50624    10239    49000  50.5 |  -19.5
```

```
Results of Cost Analysis for Region 32
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:28 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980              |         Proj Year = 1995              |
ID          |         Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |     9212112.      3952.       2331. |      7556255.      49386.        153. |    -1655857.      -18.0
SURF COATG  |     1346961.       343.       3927. |      2421794.        617.       3927. |     1074833.       79.8
FUEL COMB   |           0.         0.          0. |            0.          0.          0. |           0.        0.0
SOLV PURCH  |           0.         0.          0. |            0.          0.          0. |           0.        0.0
MISC        |           0.         0.          0. |          193.          5.         39. |         193.        0.0
--------------------------------------------------------------------------------------------------------------
            |    10559070.      4295.       2458. |      9978242.      50007.        200. |     -580831.       -5.5
```

```
Results of Emission Projection for Region  33
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:29 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                    Base Year = 1980                   |                    Proj Year = 1995                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1391     1279    24591    24591    25870    0.4 |     1470     1219    22174    12358    13577   42.6 |  -47.5
CHEM MFG    |      517      517     1151     1151     1668    0.0 |      972      439     1954      249      688   76.5 |  -58.8
SURF COATG  |    15328    15328    26867    26867    42195    0.0 |    22510    22183    39427    12836    35018   43.5 |  -17.0
FUEL COMB   |     2564     2564     4055     4055     6619    0.0 |     3472     3472     5571     5571     9043    0.0 |   36.6
SOLV PURCH  |   126654   126654   225162   225162   351816    0.0 |   205198   205198   364796   364796   569994    0.0 |   62.0
MISC        |    32254    32254    35868    35404    67658    0.7 |    42142    41775    49384    31732    73507   19.7 |    8.6
------------------------------------------------------------------------------------------------------------------------------
            |   178708   178596   317694   317230   495826    0.1 |   275765   274287   483306   427541   701828    7.5 |   41.5
```

```
Results of Cost Analysis for Region 33
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:29 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980              |             Proj Year = 1995            |
ID          |         Cost     Emis Red     Cost Eff |         Cost     Emis Red     Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |       -2688.         112.           0. |     -204348.       10067.           0. |     -201660.         0.0
CHEM MFG    |           0.           0.           0. |      737120.        2238.         329. |      737120.         0.0
SURF COATG  |           0.           0.           0. |     5889806.       26919.         219. |     5889806.         0.0
FUEL COMB   |           0.           0.           0. |           0.           0.           0. |           0.         0.0
SOLV PURCH  |           0.           0.           0. |           0.           0.           0. |           0.         0.0
MISC        |      225504.         464.         486. |     8725462.       18019.         484. |     8499958.      3769.3
--------------------------------------------------------------------------------------------------------------
            |      222816.         576.         387. |    15148040.       57242.         265. |    14925220.      6698.5
```

```
Results of Emission Projection for Region  34
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:29 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                    Base Year = 1980                   |                    Proj Year = 1995                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    36054     7996     5480     2098    10094   75.7 |    53840     8809     9192      296     9105   85.6 |   -9.8
CHEM MFG    |  1091207    39849     2283     2283    42132   96.1 |  1856738    70825     4199      151    70976   96.2 |   68.5
SURF COATG  |    40170    38793      819      819    39612    3.4 |    87224    63582     1530      285    63867   28.0 |   61.2
FUEL COMB   |     8050     8050      247      247     8297    0.0 |    11717    11717      305      305    12022    0.0 |   44.9
SOLV PURCH  |   128112   128112     6743     6743   134855    0.0 |   232983   232983    12263    12263   245246    0.0 |   81.9
MISC        |    59673    12454        0        0    12454   79.1 |    86498    16523        0        0    16523   80.9 |   32.7
------------------------------------------------------------------------------------------------------------------------------
            |  1363266   235254    15572    12190   247444   82.1 |  2329000   404440    27488    13299   417738   82.3 |   68.8
```

```
Results of Cost Analysis for Region 34
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:29 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980              |             Proj Year = 1995            |
ID          |         Cost     Emis Red     Cost Eff |         Cost     Emis Red     Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |    30330310.       31440.         965. |    58521150.       53927.        1085. |    28190840.        92.9
CHEM MFG    |   -11556510.     1051358.           0. |   -17321910.     1789960.           0. |    -5765399.         0.0
SURF COATG  |      312579.        1377.         227. |     3132135.       24887.         126. |     2819556.       902.0
FUEL COMB   |           0.           0.           0. |           0.           0.           0. |           0.         0.0
SOLV PURCH  |           0.           0.           0. |           0.           0.           0. |           0.         0.0
MISC        |    21567230.       47219.         457. |    32268760.       69975.         461. |    10701530.        49.6
--------------------------------------------------------------------------------------------------------------
            |    40653620.     1131394.          36. |    76600140.     1938750.          40. |    35946520.        88.4
```

```
Results of Emission Projection for Region  35
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:29 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                     |                   Proj Year = 1995                    |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr      LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr      LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1340     1340        0        0     1340      0.0 |     1212     1031        0        0     1031     15.0 |  -23.1
FUEL COMB   |      601      601        0        0      601      0.0 |      896      896        0        0      896      0.0 |   49.1
SOLV PURCH  |     4186     4186        0        0     4186      0.0 |     7775     7775        0        0     7775      0.0 |   85.7
------------------------------------------------------------------------------------------------------------------------------
            |     6127     6127        0        0     6127      0.0 |     9883     9702        0        0     9702      1.8 |   58.3


Results of Cost Analysis for Region 35
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:29 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |           Proj Year = 1995             |
ID          |        Cost     Emis Red    Cost Eff |         Cost     Emis Red    Cost Eff |     Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |          0.          0.          0. |       -4188.        181.          0. |      -4188.        0.0
FUEL COMB   |          0.          0.          0. |          0.          0.          0. |          0.        0.0
SOLV PURCH  |          0.          0.          0. |          0.          0.          0. |          0.        0.0
-------------------------------------------------------------------------------------------------------------
            |          0.          0.          0. |       -4188.        181.          0. |      -4188.        0.0


Results of Emission Projection for Region  36
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:30 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                     |                   Proj Year = 1995                    |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr      LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr      LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    93995    20404    20404     78.3 |        0        0    95439     8120     8120     91.5 |  -60.2
CHEM MFG    |        0        0    91620    23471    23471     74.4 |        0        0   139566     5790     5790     95.9 |  -75.3
SURF COATG  |        0        0   175053    93074    93074     46.8 |        0        0   264865    36925    36925     86.1 |  -60.3
FUEL COMB   |        0        0    25278    25278    25278      0.0 |        0        0    26564    26564    26564      0.0 |    5.1
SOLV PURCH  |        0        0   334152   334152   334152      0.0 |        0        0   535202   535202   535202      0.0 |   60.2
MISC        |        0        0    49990    21382    21382     57.2 |        0        0    60059    10300    10300     82.8 |  -51.8
------------------------------------------------------------------------------------------------------------------------------
            |        0        0   770088   517761   517761     32.8 |        0        0  1121695   622902   622902     44.5 |   20.3


Results of Cost Analysis for Region 36
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:30 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |           Proj Year = 1995             |
ID          |        Cost     Emis Red    Cost Eff |         Cost     Emis Red    Cost Eff |     Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |   24973600.      73591.        339. |   70864820.      87318.        812. |   45891210.      183.8
CHEM MFG    |    3310755.      68149.         49. |    8150023.     133776.         61. |    4839268.      146.2
SURF COATG  |   15385890.      81979.        188. |   53532740.     227940.        235. |   38146850.      247.9
FUEL COMB   |          0.          0.          0. |          0.          0.          0. |          0.        0.0
SOLV PURCH  |          0.          0.          0. |          0.          0.          0. |          0.        0.0
MISC        |    6288756.      28608.        220. |   10608620.      49759.        213. |    4319859.       68.7
-------------------------------------------------------------------------------------------------------------
            |   49959010.     252327.        198. |  143156200.     498793.        287. |   93197180.      186.5
```

```
Results of Emission Projection for Region  37
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:30 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                    |                   Proj Year = 1995                    |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    58888    48710   650426     5503    54213   92.4  |    65646    33570   664935     3063    36633   95.0  |  -32.4
CHEM MFG    |     6106     4648     1619     1619     6267   18.9  |     9805     7734     2707      140     7874   37.1  |   25.6
SURF COATG  |   663776     1430     9173     4189     5619   99.2  |  1181178     9322    16034      216     9538   99.2  |   69.7
FUEL COMB   |    35147    35147     9836     9836    44983    0.0  |    41060    41060    11704    11704    52764    0.0  |   17.3
SOLV PURCH  |    34992    34992     8288     8288    43280    0.0  |    72005    72005    17055    17055    89059    0.0  |  105.8
MISC        |     2178     2178     1994      905     3083   26.1  |     3071     3071     3108      403     3474   43.8  |   12.7
-------------------------------------------------------------------------------------------------------------------------------
            |   801087   127105   681336    30340   157445   89.4  |  1372765   166762   715542    32580   199342   90.5  |   26.6
```

```
Results of Cost Analysis for Region 37
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:30 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |          Proj Year = 1995            |
ID          |        Cost    Emis Red    Cost Eff  |        Cost    Emis Red    Cost Eff  |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |   56565800.    655101.         86.  |  144305600.    693947.        208.  |   87739830.       155.1
CHEM MFG    |    1331154.      1458.        913.  |    3749130.      4638.        808.  |    2417976.       181.6
SURF COATG  |  118799200.    667330.        178.  |  219770500.   1187674.        185.  |  100971300.        85.0
FUEL COMB   |          0.         0.          0.  |          0.         0.          0.  |          0.         0.0
SOLV PURCH  |          0.         0.          0.  |          0.         0.          0.  |          0.         0.0
MISC        |     241758.      1089.        222.  |     461473.      2706.        171.  |     219715.        90.9
--------------------------------------------------------------------------------------------------------------
            |  176937900.   1324978.        134.  |  368286800.   1888965.        195.  |  191348900.       108.1
```

```
Results of Emission Projection for Region  38
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:30 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                    |                   Proj Year = 1995                    |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   122071     6323      400       20     6343   94.8  |   188414     9544      618        7     9551   94.9  |   50.6
CHEM MFG    |    13331    13331     1112     1112    14443    0.0  |    22518    22518     1161      260    22778    3.8  |   57.7
SURF COATG  |     3434     3434     4735     4735     8169    0.0  |     5694     4940     8832     1393     6333   56.4  |  -22.5
FUEL COMB   |     7051     7051     2271     2271     9322    0.0  |     9455     9455     3118     3118    12573    0.0  |   34.9
SOLV PURCH  |    34141    34141     8537     8537    42678    0.0  |    60101    60101    15028    15028    75129    0.0  |   76.0
MISC        |     3658     3658      536      536     4194    0.0  |     5388     5388      702      329     5716    6.1  |   36.3
-------------------------------------------------------------------------------------------------------------------------------
            |   183686    67938    17591    17211    85149   57.7  |   291569   111945    29459    20135   132080   58.9  |   55.1
```

```
Results of Cost Analysis for Region 38
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:30 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |          Proj Year = 1995            |
ID          |        Cost    Emis Red    Cost Eff  |        Cost    Emis Red    Cost Eff  |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |  270694400.    116128.       2331.  |  418064900.    179481.       2329.  |  147370500.        54.4
CHEM MFG    |          0.         0.          0.  |     -12023.       900.          0.  |     -12023.         0.0
SURF COATG  |          0.         0.          0.  |    1269809.      8193.        155.  |    1269809.         0.0
FUEL COMB   |          0.         0.          0.  |          0.         0.          0.  |          0.         0.0
SOLV PURCH  |          0.         0.          0.  |          0.         0.          0.  |          0.         0.0
MISC        |          0.         0.          0.  |      82934.       374.        222.  |      82934.         0.0
--------------------------------------------------------------------------------------------------------------
            |  270694400.    116128.       2331.  |  419405600.    188948.       2220.  |  148711200.        54.9
```

```
Results of Emission Projection for Region  39
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:31 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                 |                  Proj Year = 1995                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   231232    49846    49846  78.4 |        0        0   249975    18199    18199  92.7 |  -63.5
CHEM MFG    |        0        0    99770    16879    16879  83.1 |        0        0   142560     2412     2412  98.3 |  -85.7
SURF COATG  |        0        0   223368   126026   126026  43.6 |        0        0   306775    53315    53315  82.6 |  -57.7
FUEL COMB   |        0        0    14866    14746    14746   0.8 |        0        0    14087    13930    13930   1.1 |   -5.5
SOLV PURCH  |        0        0   295168   295168   295168   0.0 |        0        0   439340   439340   439340   0.0 |   48.8
MISC        |        0        0    61365    43464    43464  29.2 |        0        0    83506    22126    22126  73.5 |  -49.1
-----------------------------------------------------------------------------------------------------------------------
            |        0        0   925769   546129   546129  41.0 |        0        0  1236243   549322   549322  55.6 |    0.6


Results of Cost Analysis for Region 39
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:31 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980             |          Proj Year = 1995             |
ID          |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg  Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |   279040000.    181386.      1538. |   609803900.    231775.      2631. |   330763900.     118.5
CHEM MFG    |      190628.     82891.         2. |    23015880.    140149.       164. |    22825260.   11973.7
SURF COATG  |    26654080.     97342.       274. |    78300640.    253459.       309. |    51646560.     193.8
FUEL COMB   |           0.       120.         0. |           0.       158.         0. |           0.       0.0
SOLV PURCH  |           0.         0.         0. |           0.         0.         0. |           0.       0.0
MISC        |     3843936.     17901.       215. |    13410820.     61381.       218. |     9566882.     248.9
------------------------------------------------------------------------------------------------------------
            |   309728600.    379640.       816. |   724531200.    686922.      1055. |   414802600.     133.9


Results of Emission Projection for Region  41
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:31 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                 |                  Proj Year = 1995                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0     3265     3037     3037   7.0 |        0        0     4884      733      733  85.0 |  -75.9
CHEM MFG    |        0        0     8059      497      497  93.8 |        0        0     9634       47       47  99.5 |  -90.6
SURF COATG  |        0        0    11578     8978     8978  22.5 |        0        0    15187     3743     3743  75.4 |  -58.3
FUEL COMB   |        0        0      149      149      149   0.0 |        0        0      207      207      207   0.0 |   38.8
SOLV PURCH  |        0        0    37388    37388    37388   0.0 |        0        0    63485    63485    63485   0.0 |   69.8
MISC        |        0        0      597      119      119  80.1 |        0        0      726       48       48  93.3 |  -59.4
-----------------------------------------------------------------------------------------------------------------------
            |        0        0    61036    50168    50168  17.8 |        0        0    94123    68262    68262  27.5 |   36.1


Results of Cost Analysis for Region 41
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:31 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980             |          Proj Year = 1995             |
ID          |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg  Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |      531468.       228.      2331. |     2839000.      4151.       684. |     2307532.     434.2
CHEM MFG    |     -113430.      7562.         0. |     -111619.      9588.         0. |        1811.       0.0
SURF COATG  |      512732.      2600.       197. |     4453426.     11445.       389. |     3940694.     768.6
FUEL COMB   |           0.         0.         0. |           0.         0.         0. |           0.       0.0
SOLV PURCH  |           0.         0.         0. |           0.         0.         0. |           0.       0.0
MISC        |       41108.       478.        86. |       72884.       677.       108. |       31776.      77.3
------------------------------------------------------------------------------------------------------------
            |      971878.     10868.        89. |     7253690.     25861.       280. |     6281812.     646.4
```

```
Results of Emission Projection for Region  42
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:31 AM, Tuesday August 25, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year - 1980                   |                  Proj Year - 1995                   |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    58275      8087     8087  86.1 |        0        0    79820      1657     1657  97.9 |  -79.5
CHEM MFG    |        0        0    95982     33475    33475  65.1 |        0        0   164241      7572     7572  95.4 |  -77.4
SURF COATG  |        0        0   196094    160290   160290  18.3 |        0        0   374995     64039    64039  82.9 |  -60.0
FUEL COMB   |        0        0     4684      4684     4684   0.0 |        0        0     6289      6289     6289   0.0 |   34.3
SOLV PURCH  |        0        0    70020     70020    70020   0.0 |        0        0   123251    123251   123251   0.0 |   76.0
MISC        |        0        0    27592     20581    20581  25.4 |        0        0    38084      9705     9705  74.5 |  -52.8
---------------------------------------------------------------------------------------------------------------------------
            |        0        0   452647    297137   297137  34.4 |        0        0   786679    212512   212512  73.0 |  -28.5
```

```
Results of Cost Analysis for Region 42
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:31 AM, Tuesday August 25, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year - 1980           |             Proj Year - 1995          |
ID          |       Cost     Emis Red    Cost Eff |          Cost     Emis Red    Cost Eff |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |   21976620.      50188.        438. |     40046830.       78163.        512. |    18070210.        82.2
CHEM MFG    |   -1789561.      62507.          0. |       447843.      156669.          3. |     2237404.         0.0
SURF COATG  |   11232350.      35804.        314. |    114051000.      310956.        367. |   102818700.       915.4
FUEL COMB   |          0.          0.          0. |            0.          0.          0. |           0.         0.0
SOLV PURCH  |          0.          0.          0. |            0.          0.          0. |           0.         0.0
MISC        |     602946.       7011.         86. |      2769375.       28380.         98. |     2166429.       359.3
-------------------------------------------------------------------------------------------------------------
            |   32022360.     155510.        206. |    157315100.      574167.        274. |   125292700.       391.3
```

```
Results of Emission Projection for Region  43
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:32 AM, Tuesday August 25, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year - 1980                   |                  Proj Year - 1995                   |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1672     1672        0         0     1672   0.0 |     2123     1106        0         0     1106  47.9 |  -33.9
FUEL COMB   |      194      194        0         0      194   0.0 |      291      291        0         0      291   0.0 |   49.8
SOLV PURCH  |     6538     6538        0         0     6538   0.0 |    12869    12869        0         0    12869  -0.0 |   96.8
MISC        |     1162     1162        0         0     1162   0.0 |     1656     1656        0         0     1656   0.0 |   42.5
---------------------------------------------------------------------------------------------------------------------------
            |     9566     9566        0         0     9566   0.0 |    16939    15921        0         0    15921   6.0 |   66.4
```

```
Results of Cost Analysis for Region 43
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:32 AM, Tuesday August 25, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year - 1980           |             Proj Year - 1995          |
ID          |       Cost     Emis Red    Cost Eff |          Cost     Emis Red    Cost Eff |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |          0.          0.          0. |      -158051.        1018.          0. |     -158051.         0.0
FUEL COMB   |          0.          0.          0. |            0.          0.          0. |           0.         0.0
SOLV PURCH  |          0.          0.          0. |            0.         -0.          0. |           0.         0.0
MISC        |          0.          0.          0. |            0.          0.          0. |           0.         0.0
-------------------------------------------------------------------------------------------------------------
            |          0.          0.          0. |      -158051.        1018.          0. |     -158051.         0.0
```

```
Results of Emission Projection for Region  44
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:32 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                   |                 Proj Year = 1995                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0    18214     8070     8070  55.7 |        0        0    28694     2432     2432  91.5 |  -69.9
CHEM MFG   |        0        0   864272    60147    60147  93.0 |        0        0  1307513    14436    14436  98.9 |  -76.0
SURF COATG |        0        0   100250    60459    60459  39.7 |        0        0   174094    26530    26530  84.8 |  -56.1
FUEL COMB  |        0        0    17364    17364    17364   0.0 |        0        0    24586    24586    24586   0.0 |   41.6
SOLV PURCH |        0        0    87525    87525    87525   0.0 |        0        0   155977   155977   155977   0.0 |   78.2
MISC       |        0        0    85849    11801    11801  86.3 |        0        0   132094     6437     6437  95.1 |  -45.5
-----------------------------------------------------------------------------------------------------------------------------
           |        0        0  1173474   245366   245366  79.1 |        0        0  1822958   230399   230399  87.4 |   -6.1
```

```
Results of Cost Analysis for Region 44
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:32 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980           |          Proj Year = 1995           |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |       Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |    23363040.     10144.      2303. |    79312090.     26262.      3020. |     55949040.      239.5
CHEM MFG   |    17911160.    804125.        22. |    31060980.   1293076.        24. |     13149830.       73.4
SURF COATG |    22261760.     39791.       559. |    68825300.    147564.       466. |     46563540.      209.2
FUEL COMB  |           0.         0.         0. |           0.         0.         0. |            0.        0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |            0.        0.0
MISC       |     6529968.     74048.        88. |    12522400.    125657.       100. |      5992433.       91.8
--------------------------------------------------------------------------------------------------------------
           |    70065930.    928108.        75. |   191720800.   1592559.       120. |    121654800.      173.6
```

```
Results of Emission Projection for Region  45
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:33 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                   |                 Proj Year = 1995                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   938580   158438  1948311   151939   310377  89.2 |  1092560   108495  2256831    54957   163452  95.1 |  -47.3
CHEM MFG   |  6636224   216664  2744492   119028   335692  96.4 | 11911401   394840  4989184    13208   408048  97.6 |   21.6
SURF COATG |    87575    85202    30085    29745   114947   2.3 |   164944   160164    56381    13189   173352  21.7 |   50.8
FUEL COMB  |   360485   320582   153735   153636   474218   7.8 |   393069   337696   160392   153309   491004  11.3 |    3.5
SOLV PURCH |   146774   146774    75611    75611   222385   0.0 |   264886   264886   136457   136457   401343   0.0 |   80.5
MISC       |   126954   120659    10659     7652   128311   6.8 |   218462   205493    17576     6142   211636  10.3 |   64.9
-----------------------------------------------------------------------------------------------------------------------------
           |  8296592  1048319  4962893   537611  1585930  88.0 | 14045322  1471574  7616821   377262  1848836  91.5 |   16.6
```

```
Results of Cost Analysis for Region 45
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:33 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980           |          Proj Year = 1995           |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |       Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |   922628700.   2576514.       358. |  2573256000.   3185939.       808. |   1650628000.      178.9
CHEM MFG   |  4227248000.   9045024.       467. |  7572139000.  16492540.       459. |   3344891000.       79.1
SURF COATG |     2824090.      2713.      1041. |    17164210.     47973.       358. |     14340120.      507.8
FUEL COMB  |           0.     40002.         0. |           0.     62457.         0. |            0.        0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |            0.        0.0
MISC       |     2387352.      9302.       257. |     7101535.     24403.       291. |      4714183.      197.5
--------------------------------------------------------------------------------------------------------------
           |  5155088000.  11673560.       442. | 10169660000.  19813310.       513. |   5014573000.       97.3
```

```
Results of Emission Projection for Region  46
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:33 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                    |                  Proj Year = 1995                    |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    13374     9026        6        6     9032   32.5 |    15059     6398        6        3     6401   57.5 |  -29.1
CHEM MFG    |      246      246        0        0      246    0.0 |      360      360        0        0      360    0.0 |   46.5
SURF COATG  |      170      170        0        0      170    0.0 |      337      337        0        0      337    0.0 |   98.5
FUEL COMB   |     6146     6146      818      323     6469    7.1 |     7724     7611     1220      585     8196    8.4 |   26.7
SOLV PURCH  |    17210    17210      351      351    17561    0.0 |    37270    37270      760      760    38031    0.0 |  116.6
MISC        |      370      370        2        2      372    0.0 |      647      647        3        1      648    0.3 |   74.1
------------------------------------------------------------------------------------------------------------------------------
            |    37516    33168     1177      682    33850   12.5 |    61398    52624     1989     1349    53973   14.9 |   59.4
```

```
Results of Cost Analysis for Region 46
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:33 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980          |          Proj Year = 1995          |
ID          |        Cost    Emis Red  Cost Eff |        Cost   Emis Red   Cost Eff  |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM   |    9214092.       4348.     2119. |   11977930.      8664.      1382.  |     2763833.       30.0
CHEM MFG    |          0.          0.        0. |          0.         0.         0.  |          0.         0.0
SURF COATG  |          0.          0.        0. |          0.         0.         0.  |          0.         0.0
FUEL COMB   |          0.        495.        0. |          0.       747.         0.  |          0.         0.0
SOLV PURCH  |          0.          0.        0. |          0.         0.         0.  |          0.         0.0
MISC        |          0.          0.        0. |        428.         2.       222.  |        428.         0.0
---------------------------------------------------------------------------------------------------------
            |    9214092.       4843.     1903. |   11978350.      9413.      1272.  |     2764261.       30.0
```

```
Results of Emission Projection for Region  47
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:33 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                    |                  Proj Year = 1995                    |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0      536      384      384   28.4 |        0        0      850       29       29   96.6 |  -92.4
CHEM MFG    |        3        3       15       15       18    0.0 |        5        5       28        7       12   63.4 |  -31.8
SURF COATG  |     1697     1663     1154     1069     2732    4.2 |     2418     2245     1648      531     2776   31.7 |    1.6
FUEL COMB   |       61       61       67       67      128    0.0 |       94       94      105      105      199   -0.0 |   55.5
SOLV PURCH  |     4094     4094     4094     4094     8188    0.0 |     8800     8800     8800     8800    17601    0.0 |  115.0
MISC        |      324      324      398      398      722    0.0 |      457      457      617      617     1074    0.0 |   48.7
------------------------------------------------------------------------------------------------------------------------------
            |     6179     6145     6264     6027    12172    2.2 |    11774    11601    12049    10090    21691    9.0 |   78.2
```

```
Results of Cost Analysis for Region 47
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:33 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980          |          Proj Year = 1995          |
ID          |        Cost    Emis Red  Cost Eff |        Cost   Emis Red   Cost Eff  |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM   |     354312.        152.     2331. |    1216204.       821.      1482.  |      861892.      243.3
CHEM MFG    |          0.          0.        0. |        298.        21.        14.  |        298.         0.0
SURF COATG  |     129710.        119.     1090. |     599813.      1290.       465.  |      470103.      362.4
FUEL COMB   |          0.          0.        0. |          0.        -0.         0.  |          0.         0.0
SOLV PURCH  |          0.          0.        0. |          0.         0.         0.  |          0.         0.0
MISC        |          0.          0.        0. |          0.         0.         0.  |          0.         0.0
---------------------------------------------------------------------------------------------------------
            |     484022.        271.     1786. |    1816315.      2132.       852.  |     1332293.      275.3
```

```
Results of Emission Projection for Region  48
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:34 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                  Proj Year = 1995                   |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   115631     8798     5704     1960    10758  91.1 |   125488     7596     9144      601     8197  93.9 |  -23.8
CHEM MFG    |   426513    29475     1973     1973    31448  92.7 |   485325    39986     3369      390    40376  91.7 |   28.4
SURF COATG  |    39019    32945     3054     3054    35999  14.4 |    68353    51199     5291     1140    52339  28.9 |   45.4
FUEL COMB   |     4710     4710      511      511     5221   0.0 |     5723     5723      608      608     6331   0.0 |   21.3
SOLV PURCH  |    72563    72563     8063     8063    80626   0.0 |   129953   129953    14440    14440   144393   0.0 |   79.1
MISC        |    20920    18953     2977     2977    21930   8.2 |    34671    30675     4861     1167    31842  19.5 |   45.2
----------------------------------------------------------------------------------------------------------------------------
            |   679356   167444    22282    18538   185982  73.5 |   849512   265131    37714    18347   283478  68.0 |   52.4
```

```
Results of Cost Analysis for Region 48
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:34 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |          Proj Year = 1995            |
ID          |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |    17607490.    110577.        159. |    55528860.    126435.        439. |    37921370.      215.4
CHEM MFG    |    -5517937.    397038.          0. |    -5008079.    448317.          0. |      509859.        0.0
SURF COATG  |     1217473.      6074.        200. |     5423635.     21306.        255. |     4206162.      345.5
FUEL COMB   |           0.         0.          0. |           0.         0.          0. |           0.        0.0
SOLV PURCH  |           0.         0.          0. |           0.         0.          0. |           0.        0.0
MISC        |      434838.      1967.        221. |     2596534.      7690.        338. |     2161696.      497.1
-------------------------------------------------------------------------------------------------------------
            |    13741870.    515656.         27. |    58540950.    603748.         97. |    44799090.      326.0
```

```
Results of Emission Projection for Region  49
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:34 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                  Proj Year = 1995                   |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   141490    11641     8954     8596    20237  86.5 |   211425    10624    12350     3304    13928  93.8 |  -31.2
CHEM MFG    |    98597      509      398      349      858  99.1 |   238296     1237      787      117     1354  99.4 |   57.8
SURF COATG  |      642      642     3349     3327     3969   0.6 |      924      882     4954     1403     2285  61.1 |  -42.4
FUEL COMB   |     4983     4983     5221     4495     9478   7.1 |     6703     6223     7231     6633    12856   7.7 |   35.6
SOLV PURCH  |    30571    30571    23063    23063    53634   0.0 |    54090    54090    40806    40806    94896   0.0 |   76.9
MISC        |    15336    11276     4716     4383    15659  21.9 |    22028    17613     7153     2310    19922  31.7 |   27.2
----------------------------------------------------------------------------------------------------------------------------
            |   291619    59622    45701    44213   103835  69.2 |   533467    90669    73281    54573   145242  76.1 |   39.9
```

```
Results of Cost Analysis for Region 49
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:34 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |          Proj Year = 1995            |
ID          |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |     -717160.    130207.          0. |     -693080.    209847.          0. |       24081.        0.0
CHEM MFG    |    -1457061.     98137.          0. |    -3198092.    237729.          0. |    -1741031.        0.0
SURF COATG  |        499..        22.        227. |      848565.      3594.        236. |      843571.    16891.7
FUEL COMB   |           0.       726.          0. |           0.      1078.          0. |           0.        0.0
SOLV PURCH  |           0.         0.          0. |           0.         0.          0. |           0.        0.0
MISC        |      975246.      4393.        222. |     2111607.      9258.        228. |     1136361.      116.5
-------------------------------------------------------------------------------------------------------------
            |    -1193981.    233485.          0. |     -931001.    461506.          0. |      262980.        0.0
```

```
Results of Emission Projection for Region  50
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:34 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                   Proj Year = 1995                  |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      112      112         0         0      112   0.0 |      117       70         0         0       70  40.2 |   -37.3
CHEM MFG    |    99269      556         0         0      556  99.4 |   172256      893         0         0      893  99.5 |    60.5
FUEL COMB   |    10152    10152         0         0    10152   0.0 |     9640     9640         0         0     9640   0.0 |    -5.0
SOLV PURCH  |    21768    21768         0         0    21768   0.0 |    33544    33544         0         0    33544   0.0 |    54.1
MISC        |    10786    10786         0         0    10786   0.0 |    13979     4415         0         0     4415  68.4 |   -59.1
--------------------------------------------------------------------------------------------------------------------------
            |   142087    43374         0         0    43374  69.5 |   229536    48562         0         0    48562  78.8 |    12.0


Results of Cost Analysis for Region 50
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:34 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |           Proj Year = 1995           |
ID          |       Cost     Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |         0.          0.          0. |      10483.         47.        222. |       10483.         0.0
CHEM MFG    |   7277019.      98713.         74. |   13756770.     171363.         80. |     6479753.        89.0
FUEL COMB   |         0.          0.          0. |          0.          0.          0. |           0.         0.0
SOLV PURCH  |         0.          0.          0. |          0.          0.          0. |           0.         0.0
MISC        |         0.          0.          0. |    2123171.       9564.        222. |     2123171.         0.0
--------------------------------------------------------------------------------------------------------------
            |   7277019.      98713.         74. |   15890430.     180974.         88. |     8613407.       118.4


Results of Emission Projection for Region  51
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:35 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                   Proj Year = 1995                  |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0     20474     12043    12043  41.2 |        0        0     27235      3279     3279  88.0 |   -72.8
CHEM MFG    |        0        0     10221      8659     8659  15.3 |        0        0     16679      2225     2225  86.7 |   -74.3
SURF COATG  |        0        0     68649     44623    44623  35.0 |        0        0     86779     18296    18296  78.9 |   -59.0
FUEL COMB   |        0        0      4906      4906     4906   0.0 |        0        0      6207      6207     6207   0.0 |    26.5
SOLV PURCH  |        0        0    115263    115263   115263   0.0 |        0        0    183353    183353   183353   0.0 |    59.1
MISC        |        0        0     14851      6931     6931  53.3 |        0        0     23745      6985     6985  70.6 |     0.8
--------------------------------------------------------------------------------------------------------------------------
            |        0        0    234364    192425   192425  17.9 |        0        0    343998    220347   220347  35.9 |    14.5


Results of Cost Analysis for Region 51
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:35 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |           Proj Year = 1995           |
ID          |       Cost     Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |  18521100.       8431.       2197. |   57071790.      23955.       2382. |    38550690.       208.1
CHEM MFG    |    102568.       1562.         66. |    1967862.      14454.        136. |     1865294.      1818.6
SURF COATG  |   7347002.      24026.        306. |   26836950.      68483.        392. |    19489950.       265.3
FUEL COMB   |         0.          0.          0. |          0.          0.          0. |           0.         0.0
SOLV PURCH  |         0.          0.          0. |          0.          0.          0. |           0.         0.0
MISC        |     87912.       7920.         11. |     716799.      16760.         43. |      628887.       715.4
--------------------------------------------------------------------------------------------------------------
            |  26058580.      41939.        621. |   86593400.     123651.        700. |    60534820.       232.3
```

```
Results of Emission Projection for Region  52
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:35 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                  |                  Proj Year = 1995                  |
ID         |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     18750    16983        0        0    16983   9.4 |     15635     9018        0        0     9018  42.3 |   -46.9
CHEM MFG   |        10        0        0        0        0 100.0 |        11        0        0        0        0 100.0 |     0.0
FUEL COMB  |     12318    12318        0        0    12318   0.0 |     12131    12131        0        0    12131   0.0 |    -1.5
SOLV PURCH |      1102     1102        0        0     1102   0.0 |      1837     1837        0        0     1837   0.0 |    66.7
MISC       |      1552     1552        0        0     1552   0.0 |      2214     2061        0        0     2061   6.9 |    32.8
--------------------------------------------------------------------------------------------------------------------------------
           |     33732    31955        0        0    31955   5.3 |     31829    25047        0        0    25047  21.3 |   -21.6
```

```
Results of Cost Analysis for Region 52
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:35 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980           |           Proj Year = 1995           |
ID         |          Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |        Abs Chg   Prct Chg
----------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      2483699.       1767.       1406. |      2118889.       6617.        320. |       -364810.      -14.7
CHEM MFG   |         -150.         10.          0. |         -170.         11.          0. |           -20.        0.0
FUEL COMB  |            0.          0.          0. |            0.          0.          0. |             0.        0.0
SOLV PURCH |            0.          0.          0. |            0.          0.          0. |             0.        0.0
MISC       |            0.          0.          0. |        34051.        153.        222. |         34051.        0.0
----------------------------------------------------------------------------------------------------------------------
           |      2483549.       1777.       1398. |      2152770.       6782.        317. |       -330779.      -13.3
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:35 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                  |                  Proj Year = 1995                  |
ID         |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   2261926   419131  5995826   850400  1269531  84.6 |   2850894   318259  7475366   280792   599052  94.2 |   -52.8
CHEM MFG   |   9029663   422308  6814311   668432  1090740  93.1 |  15740994   726324 12063985   134314   860638  96.9 |   -21.1
SURF COATG |   1408711   394641  1728687  1210559  1605200  48.8 |   2422745   663253  2793407   483074  1146327  78.0 |   -28.6
FUEL COMB  |    649795   607706   442590   433741  1041447   4.7 |    725690   666523   517197   499396  1165920   6.2 |    12.0
SOLV PURCH |   1355797  1355797  3240896  3240896  4596693   0.0 |   2425385  2425385  5607657  5607657  8033042   0.0 |    74.8
MISC       |    439043   281284   993342   342087   623371  56.5 |    670635   406940  1401845   202678   609618  70.6 |    -2.2
--------------------------------------------------------------------------------------------------------------------------------
           |  15144935  3480867 19215652  6746115 10226982  70.2 |  24836340  5206684 29859460  7207912 12414596  77.3 |    21.4
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:35 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980           |           Proj Year = 1995           |
ID         |          Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |        Abs Chg   Prct Chg
----------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   6192942000.    6988221.        886. |  16852810000.    9727208.       1733. |   10659870000.      172.1
CHEM MFG   |   4374478000.   14753230.        297. |   8018842000.   26944340.        298. |    3644364000.       83.3
SURF COATG |    352367600.    1532198.        230. |   1128308000.    4069825.        277. |     775940500.      220.2
FUEL COMB  |            0.      50938.          0. |            0.      76967.          0. |             0.        0.0
SOLV PURCH |            0.          0.          0. |            0.          0.          0. |             0.        0.0
MISC       |    214639400.     809014.        265. |    388760500.    1462861.        266. |     174121100.       81.1
----------------------------------------------------------------------------------------------------------------------
           |  11134430000.   24133600.        461. |  26388720000.   42281200.        624. |   15254290000.      137.0
```

```
Results of Emission Projection for Region  1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:32 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                 |                  Proj Year = 2000                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    32766    25804    25804  21.2 |        0        0    37304     9146     9146  75.5 |  -64.6
CHEM MFG    |        0        0   432570    24913    24913  94.2 |        0        0   774651      205      205 100.0 |  -99.2
SURF COATG  |        0        0     2896     2050     2050  29.2 |        0        0     5622      588      588  89.5 |  -71.3
FUEL COMB   |        0        0    20614    20614    20614   0.0 |        0        0    23921    23921    23921   0.0 |   16.0
SOLV PURCH  |        0        0    80407    80407    80407   0.0 |        0        0   172842   172842   172842   0.0 |  115.0
MISC        |        0        0    23980    16441    16441  31.4 |        0        0    35577    11876    11876  66.6 |  -27.8
------------------------------------------------------------------------------------------------------------------------------
            |        0        0   593233   170229   170229  71.3 |        0        0  1049919   218579   218579  79.2 |   28.4
```

```
Results of Cost Analysis for Region 1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:32 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980            |          Proj Year = 2000            |
ID          |         Cost   Emis Red   Cost Eff |          Cost   Emis Red   Cost Eff |       Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   |    10315390.      6962.      1482. |     18959300.     28159.       673. |      8643919.       83.8
CHEM MFG    |    -6094305.    407657.         0. |    -10295300.    774446.         0. |     -4200998.        0.0
SURF COATG  |      192042.       846.       227. |      1174943.      5034.       233. |       982901.      511.8
FUEL COMB   |           0.         0.         0. |            0.         0.         0. |            0.        0.0
SOLV PURCH  |           0.         0.         0. |            0.         0.         0. |            0.        0.0
MISC        |     1770546.      7539.       235. |      5442484.     23701.       230. |      3671938.      207.4
-----------------------------------------------------------------------------------------------------------------
            |     6183668.    423004.        15. |     15281430.    831339.        18. |      9097760.      147.1
```

```
Results of Emission Projection for Region  3
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:32 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                 |                  Proj Year = 2000                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      925      640     3386      961     1601  62.9 |     1881      681     7042      105      785  91.2 |  -50.9
CHEM MFG    |     2931      494      791      790     1284  65.5 |     4391      743     1722       81      824  86.5 |  -35.8
SURF COATG  |      645      645     2877     2877     3522   0.0 |     1838     1189     8192      422     1610  83.9 |  -54.3
FUEL COMB   |     3556     3556     5963     5963     9519   0.0 |     5668     5668     9093     9093    14762   0.0 |   55.1
SOLV PURCH  |     8473     8473    16447    16447    24920   0.0 |    22735    22735    44131    44131    66866   0.0 |  168.3
MISC        |      140      140       84       84      224   0.0 |      230      230      200       60      290  32.5 |   29.5
------------------------------------------------------------------------------------------------------------------------------
            |    16670    13948    29548    27122    41070  11.1 |    36742    31245    70381    53892    85138  20.5 |  107.3
```

```
Results of Cost Analysis for Region 3
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:32 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980            |          Proj Year = 2000            |
ID          |         Cost   Emis Red   Cost Eff |          Cost   Emis Red   Cost Eff |       Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   |     4115109.      2710.      1518. |     18461750.      8137.      2269. |     14346640.      348.6
CHEM MFG    |      -36333.      2438.         0. |       256895.      5289.        49. |       293228.        0.0
SURF COATG  |           0.         0.         0. |      7339562.      8420.       872. |      7339562.        0.0
FUEL COMB   |           0.         0.         0. |            0.         0.         0. |            0.        0.0
SOLV PURCH  |           0.         0.         0. |            0.         0.         0. |            0.        0.0
MISC        |           0.         0.         0. |        31071.       140.       222. |        31071.        0.0
-----------------------------------------------------------------------------------------------------------------
            |     4078776.      5148.       792. |     26089280.     21985.      1187. |     22010500.      539.6
```

```
Results of Emission Projection for Region  4
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:32 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                   |                 Proj Year = 2000                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     8594     1488      300       37     1525  82.9 |     8794      864      387       32      897  90.2 |  -41.2
CHEM MFG   |    15716     7805    10350      153     7958  69.5 |    34502    16481    24696        5    16486  72.2 |  107.2
SURF COATG |     1383     1383      130      130     1513   0.0 |     3126     3113      294       38     3152   7.8 |  108.3
FUEL COMB  |    11914    11914      229      229    12143   0.0 |    13616    13616      254      254    13870   0.0 |   14.2
SOLV PURCH |    64229    64229     1311     1311    65540   0.0 |   143052   143052     2920     2920   145972   0.0 |  122.7
MISC       |     8071     1880        0        0     1880  76.7 |    19694     3493        0        0     3493  82.3 |   85.8
-----------------------------------------------------------------------------------------------------------------------------
           |   109907    88699    12320     1860    90559  25.9 |   222786   180620    28549     3249   183870  26.8 |  103.0
```

```
Results of Cost Analysis for Region 4
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:32 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |          Proj Year = 2000            |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------
PETROLEUM  |   16630290.       7369.       2257. |   17564840.       8285.       2120. |     934548.         5.6
CHEM MFG   |    1081718.      18108.         60. |    2409807.      42711.         56. |    1328089.       122.8
SURF COATG |          0.          0.          0. |      71590.        268.        267. |      71590.         0.0
FUEL COMB  |          0.          0.          0. |          0.          0.          0. |          0.         0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |          0.         0.0
MISC       |    1374402.       6191.        222. |    3596746.      16202.        222. |    2222344.       161.7
----------------------------------------------------------------------------------------------------------------
           |   19086410.      31668.        603. |   23642980.      67465.        350. |    4556570.        23.9
```

```
Results of Emission Projection for Region  5
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:33 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                   |                 Proj Year = 2000                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0   935714   196609   196609  79.0 |        0        0  1369442    42053    42053  96.9 |  -78.6
CHEM MFG   |        0        0    34451    23334    23334  32.3 |        0        0    74187      359      359  99.5 |  -98.5
SURF COATG |        0        0   191901   127669   127669  33.5 |        0        0   436840    29861    29861  93.2 |  -76.6
FUEL COMB  |        0        0    48125    46406    46406   3.6 |        0        0    65955    62936    62936   4.6 |   35.6
SOLV PURCH |        0        0   426532   426532   426532   0.0 |        0        0   983648   983648   983648   0.0 |  130.6
MISC       |        0        0   189824    27657    27657  85.4 |        0        0   328493    23091    23091  93.0 |  -16.5
-----------------------------------------------------------------------------------------------------------------------------
           |        0        0  1826547   848207   848207  53.6 |        0        0  3258565  1141948  1141948  65.0 |   34.6
```

```
Results of Cost Analysis for Region 5
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:33 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |          Proj Year = 2000            |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------
PETROLEUM  |  639971300.     739105.        866. | 2479431000.    1327389.       1868. | 1839460000.       287.4
CHEM MFG   |    1505059.      11117.        135. |    9970069.      73829.        135. |    8465010.       562.4
SURF COATG |   32424240.      64232.        505. |  195889400.     406979.        481. |  163465200.       504.1
FUEL COMB  |          0.       1719.          0. |          0.       3019.          0. |          0.         0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |          0.         0.0
MISC       |   35980550.     162167.        222. |   69320060.     305402.        227. |   33339510.        92.7
----------------------------------------------------------------------------------------------------------------
           |  709881200.     978340.        726. | 2754611000.    2116618.       1301. | 2044729000.       288.0
```

```
Results of Emission Projection for Region  6
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:33 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                 Proj Year = 2000                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     2122     1778    12469     1962     3740  74.4 |     3802      630    19026      627     1257  94.5 |  -66.4
CHEM MFG   |     5657     3414     3221     1521     4935  44.4 |    20466    13570     7477       95    13665  51.1 |  176.9
SURF COATG |      483      483     6997     6430     6913   7.6 |      805      728    11661     1926     2655  78.7 |  -61.6
FUEL COMB  |     4200     3583     3829     3658     7241   9.8 |     6558     5266     5678     4736    10002  18.3 |   38.1
SOLV PURCH |    16741    16741    19652    19652    36393   0.0 |    43733    43733    51337    51337    95069   0.0 |  161.2
MISC       |     3870     2963      999      999     3962  18.6 |     7471     6171     1964      921     7093  24.8 |   79.0
--------------------------------------------------------------------------------------------------------------------------------
           |    33073    28962    47167    34222    63184  21.3 |    82834    70099    97143    59642   129741  27.9 |  105.3
```

```
Results of Cost Analysis for Region 6
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:33 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |        Base Year = 1980              |          Proj Year = 2000            |
ID         |        Cost   Emis Red    Cost Eff |        Cost   Emis Red    Cost Eff |     Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |    9759443.     10851.        899. |   38388380.     21572.       1780. |   28628930.      293.3
CHEM MFG   |     493911.      3943.        125. |    2279031.     14277.        160. |    1785120.      361.4
SURF COATG |     128709.       567.        227. |    2611431.      9812.        266. |    2482722.     1928.9
FUEL COMB  |          0.       788.          0. |          0.      2234.          0. |          0.        0.0
SOLV PURCH |          0.         0.          0. |          0.         0.          0. |          0.        0.0
MISC       |     438954.       907.        484. |    1131623.      2342.        483. |     692669.      157.8
--------------------------------------------------------------------------------------------------------------
           |   10821020.     17056.        634. |   44410460.     50236.        884. |   33589450.      310.4
```

```
Results of Emission Projection for Region  7
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:33 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                 Proj Year = 2000                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0     3047      995      995  67.3 |        0        0     5457       64       64  98.8 |  -93.6
CHEM MFG   |        0        0    11761     3327     3327  71.7 |        0        0    28939      104      104  99.6 |  -96.9
SURF COATG |        0        0    53122    36053    36053  32.1 |        0        0    94482     6261     6261  93.4 |  -82.6
FUEL COMB  |        0        0      565      565      565   0.0 |        0        0      954      954      954   0.0 |   68.9
SOLV PURCH |        0        0   100324   100324   100324   0.0 |        0        0   209989   209989   209989   0.0 |  109.3
MISC       |        0        0     4256     3046     3046  28.4 |        0        0     5416      545      545  89.9 |  -82.1
--------------------------------------------------------------------------------------------------------------------------------
           |        0        0   173075   144310   144310  16.6 |        0        0   345237   217917   217917  36.9 |   51.0
```

```
Results of Cost Analysis for Region 7
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:33 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |        Base Year = 1980              |          Proj Year = 2000            |
ID         |        Cost   Emis Red    Cost Eff |        Cost   Emis Red    Cost Eff |     Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |     983585.      2052.        479. |    3060982.      5393.        568. |    2077397.      211.2
CHEM MFG   |    1388580.      8434.        165. |    5224059.     28835.        181. |    3835479.      276.2
SURF COATG |    4706528.     17069.        276. |   20224060.     88221.        229. |   15517530.      329.7
FUEL COMB  |          0.         0.          0. |          0.         0.          0. |          0.        0.0
SOLV PURCH |          0.         0.          0. |          0.         0.          0. |          0.        0.0
MISC       |     119596.      1210.         99. |     620778.      4872.        127. |     501182.      419.1
--------------------------------------------------------------------------------------------------------------
           |    7198289.     28765.        250. |   29129880.    127321.        229. |   21931590.      304.7
```

```
Results of Emission Projection for Region  8
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:34 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %    Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                       |                Proj Year = 2000                       |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC  |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      192       40    14942      7000     7040   53.5  |      267       26    18834      2249     2275   88.1  |  -67.7
CHEM MFG    |     8825      809   312904      4190     4999   98.4  |    13369     1227   555523       146     1373   99.8  |  -72.5
SURF COATG  |        0        0    47712     12965    12965   72.8  |        0        0    99966      2649     2649   97.4  |  -79.6
FUEL COMB   |       57       57      176       176      233    0.0  |       85       85      291       291      376    0.0  |   61.3
SOLV PURCH  |      517      517    12402     12402    12919    0.0  |     1061     1061    25452     25452    26512    0.0  |  105.2
MISC        |      112      112    75436       342      454   99.4  |      145      145   135036        17      163   99.9  |  -64.1
-------------------------------------------------------------------------------------------------------------------------------
            |     9703     1535   463572     37075    38610   91.8  |    14927     2545   835100     30803    33347   96.1  |  -13.6
```

```
Results of Cost Analysis for Region 8
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:34 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %    Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980              |          Proj Year = 2000              |
ID          |        Cost    Emis Red     Cost Eff  |         Cost    Emis Red    Cost Eff  |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |   18867110.       8094.        2331.  |    55509530.      16826.       3299.  |    36642420.       194.2
CHEM MFG    |   -4129055.     316730.           0.  |    -2853738.     567519.          0.  |     1275317.         0.0
SURF COATG  |    7887569.      34747.         227.  |    22081990.      97317.        227.  |    14194420.       180.0
FUEL COMB   |          0.          0.           0.  |           0.          0.          0.  |           0.         0.0
SOLV PURCH  |          0.          0.           0.  |           0.          0.          0.  |           0.         0.0
MISC        |   10776760.      75094.         144.  |    19277170.     135019.        143.  |     8500410.        78.9
-----------------------------------------------------------------------------------------------------------
            |   33402390.     434665.          77.  |    94014950.     816680.        115.  |    60612560.       181.5
```

```
Results of Emission Projection for Region  9
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:34 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %    Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                       |                Proj Year = 2000                       |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC  |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0      210        21       21   90.0  |        0        0      248         6        6   97.6  |  -71.7
SURF COATG  |        0        0      171       150      150   12.3  |        0        0      289        28       28   90.3  |  -81.3
FUEL COMB   |        0        0       37        37       37    0.0  |        0        0       48        48       48    0.0  |   30.9
SOLV PURCH  |        0        0     5182      5182     5182    0.0  |        0        0     9790      9790     9790    0.0  |   88.9
MISC        |        0        0      758       758      758    0.0  |        0        0     1315       232      232   82.4  |  -69.4
-------------------------------------------------------------------------------------------------------------------------------
            |        0        0     6358      6148     6148    3.3  |        0        0    11691     10105    10105   13.6  |   64.4
```

```
Results of Cost Analysis for Region 9
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:34 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %    Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980              |          Proj Year = 2000              |
ID          |        Cost    Emis Red     Cost Eff  |         Cost    Emis Red    Cost Eff  |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |      69552.        189.         368.  |       89011.        242.        368.  |      19459.        28.0
SURF COATG  |       7398.         21.         352.  |      186952.        261.        715.  |     179554.      2427.1
FUEL COMB   |          0.          0.           0.  |           0.          0.          0.  |          0.         0.0
SOLV PURCH  |          0.          0.           0.  |           0.          0.          0.  |          0.         0.0
MISC        |          0.          0.           0.  |      240365.       1083.        222.  |     240365.         0.0
-----------------------------------------------------------------------------------------------------------
            |      76950.        210.         366.  |      516329.       1586.        326.  |     439379.       571.0
```

```
Results of Emission Projection for Region  10
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:34 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                     |                  Proj Year = 2000                      |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1274     1103     5211     4679     5782   10.8  |     2444     1827     9752      375     2201   82.0  |  -61.9
CHEM MFG    |        0        0     3032     3030     3030    0.1  |        0        0     8172        0        0  100.0  | -100.0
SURF COATG  |      908      908     8633     7931     8839    7.4  |     2227     1912    20838     2309     4221   81.7  |  -52.2
FUEL COMB   |     2661     2661     1036     1036     3697    0.0  |     4256     4256     1564     1564     5820    0.0  |   57.4
SOLV PURCH  |    24556    24556    87063    87063   111619    0.0  |    63808    63808   226230   226230   290038    0.0  |  159.8
MISC        |        0        0     1204      135      135   88.8  |        0        0     2501      217      217   91.3  |   60.9
--------------------------------------------------------------------------------------------------------------------------------
            |    29399    29228   106179   103874   133102    1.8  |    72734    71802   269058   230695   302498   11.5  |  127.3
```

```
Results of Cost Analysis for Region 10
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:34 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980            |          Proj Year = 2000             |
ID          |        Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |    1638693.        703.       2331. |      7008147.       9995.        701. |    5369454.       327.7
CHEM MFG    |        -30.          2.          0. |      1813117.       8172.        222. |    1813147.         0.0
SURF COATG  |     159354.        702.        227. |      4428253.      18844.        235. |    4268899.      2678.9
FUEL COMB   |          0.          0.          0. |            0.          0.          0. |          0.         0.0
SOLV PURCH  |          0.          0.          0. |            0.          0.          0. |          0.         0.0
MISC        |     194214.       1069.        182. |       425666.       2284.        186. |     231452.       119.2
------------------------------------------------------------------------------------------------------------
            |    1992231.       2476.        805. |     13675180.      39294.        348. |   11682950.       586.4
```

```
Results of Emission Projection for Region  11
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:34 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                     |                  Proj Year = 2000                      |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    20368     3222     3222   84.2  |        0        0    28068      588      588   97.9  |  -81.8
CHEM MFG    |        0        0     5541     1505     1505   72.8  |        0        0    11592       34       34   99.7  |  -97.7
SURF COATG  |        0        0    15742    15588    15588    1.0  |        0        0    33007     4651     4651   85.9  |  -70.2
FUEL COMB   |        0        0     9449     9449     9449    0.0  |        0        0    15396    15396    15396    0.0  |   62.9
SOLV PURCH  |        0        0   121011   121011   121011    0.0  |        0        0   248606   248606   248606    0.0  |  105.4
MISC        |        0        0    15388     1507     1507   90.2  |        0        0    22007      905      905   95.9  |  -39.9
--------------------------------------------------------------------------------------------------------------------------------
            |        0        0   187499   152282   152282   18.8  |        0        0   358676   270181   270181   24.7  |   77.4
```

```
Results of Cost Analysis for Region 11
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:34 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980            |          Proj Year = 2000             |
ID          |        Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |   10091110.      17146.        589. |     45804620.      27480.       1667. |   35713510.       353.9
CHEM MFG    |     490829.       4036.        122. |      4440937.      11558.        384. |    3950108.       804.8
SURF COATG  |      34958.        154.        227. |      6436827.      28356.        227. |    6401869.     18313.0
FUEL COMB   |          0.          0.          0. |            0.          0.          0. |          0.         0.0
SOLV PURCH  |          0.          0.          0. |            0.          0.          0. |          0.         0.0
MISC        |    3023910.      13881.        218. |      4570276.      21101.        217. |    1546366.        51.1
------------------------------------------------------------------------------------------------------------
            |   13640810.      35217.        387. |     61252660.      88495.        692. |   47611850.       349.0
```

```
Results of Emission Projection for Region  13
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:35 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                  |                  Proj Year = 2000                   |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
----------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      599      599         0         0      599   0.0 |      823      292         0         0      292  64.6 |   -51.3
CHEM MFG    |      236      236         0         0      236   0.0 |      528      528         0         0      528   0.0 |   123.9
FUEL COMB   |     1551     1551         0         0     1551   0.0 |     2360     2360         0         0     2360   0.0 |    52.2
SOLV PURCH  |    12392    12392         0         0    12392   0.0 |    27088    27088         0         0    27088  -0.0 |   118.6
MISC        |     3000     3000         0         0     3000   0.0 |     4607     4607         0         0     4607   0.0 |    53.6
----------------------------------------------------------------------------------------------------------------------------------
            |    17778    17778         0         0    17778   0.0 |    35406    34875         0         0    34875   1.5 |    96.2


Results of Cost Analysis for Region 13
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:35 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |           Proj Year = 2000          |
ID          |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |       Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |          0.          0.          0. |     -78537.        531.          0. |      -78537.        0.0
CHEM MFG    |          0.          0.          0. |          0.          0.          0. |           0.        0.0
FUEL COMB   |          0.          0.          0. |          0.          0.          0. |           0.        0.0
SOLV PURCH  |          0.          0.          0. |          0.         -0.          0. |           0.        0.0
MISC        |          0.          0.          0. |          0.          0.          0. |           0.        0.0
---------------------------------------------------------------------------------------------------------------
            |          0.          0.          0. |     -78537.        531.          0. |      -78537.        0.0


Results of Emission Projection for Region  14
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:35 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                  |                  Proj Year = 2000                   |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
----------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    224238     46435    46435  79.3 |        0        0    304133      7811     7811  97.4 |   -83.2
CHEM MFG    |        0        0     52015     13660    13660  73.7 |        0        0    100212      1646     1646  98.4 |   -87.9
SURF COATG  |        0        0    180144    132027   132027  26.7 |        0        0    295029     23407    23407  92.1 |   -82.3
FUEL COMB   |        0        0      6899      6899     6899   0.0 |        0        0      7654      7654     7654   0.0 |    10.9
SOLV PURCH  |        0        0    246769    246769   246769   0.0 |        0        0    409417    409417   409417   0.0 |    65.9
MISC        |        0        0     48734      9809     9809  79.9 |        0        0     44225      1233     1233  97.2 |   -87.4
----------------------------------------------------------------------------------------------------------------------------------
            |        0        0    758799    455599   455599  40.0 |        0        0   1160669    451167   451167  61.1 |    -1.0


Results of Cost Analysis for Region 14
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:35 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |           Proj Year = 2000          |
ID          |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |       Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |  384486600.     177803.       2162. | 1196671000.     296322.       4038. |   812184800.      211.2
CHEM MFG    |    5529080.      38355.        144. |   23474150.      98566.        238. |    17945070.      324.6
SURF COATG  |    8659682.      48117.        180. |   74229490.     271622.        273. |    65569810.      757.2
FUEL COMB   |          0.          0.          0. |          0.          0.          0. |           0.        0.0
SOLV PURCH  |          0.          0.          0. |          0.          0.          0. |           0.        0.0
MISC        |    8638698.      38925.        222. |    9383143.      42992.        218. |      744445.        8.6
---------------------------------------------------------------------------------------------------------------
            |  407314000.     303200.       1343. | 1303758000.     709502.       1838. |   896444200.      220.1
```

```
Results of Emission Projection for Region  15
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:35 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                     Base Year = 1980                    |                     Proj Year = 2000                    |
ID         |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |    %Chg
-------------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    156517     11491      3781      2322     13813  91.4 |    194444      9145      4643       335      9480  95.2 |   -31.4
CHEM MFG   |    267841     12558    718440      7996     20554  97.9 |    400591     19241   1098110      1547     20789  98.6 |     1.1
SURF COATG |    232564     51084      7519      4378     55462  76.9 |    427936     90435     13220       690     91125  79.3 |    64.3
FUEL COMB  |     10890     10866       308       308     11174   0.2 |     12712     12668       496       495     13163   0.3 |    17.8
SOLV PURCH |    152202    152202     20755     20755    172957   0.0 |    298305    298305     40678     40678    338983   0.0 |    96.0
MISC       |     29461     16165       561       280     16445  45.2 |     46747     11114       849       107     11221  76.4 |   -31.8
-------------------------------------------------------------------------------------------------------------------------------------
           |    849475    254366    751364     36039    290405  81.9 |   1380735    440908   1157997     43854    484762  80.9 |    66.9


Results of Cost Analysis for Region 15
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:35 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980              |         Proj Year = 2000               |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |   89383120.     146485.        610. |  119326300.     189607.        629. |    29943220.        33.5
CHEM MFG   |  -46995860.     965727.          0. |  -58024340.    1477912.          0. |   -11028480.         0.0
SURF COATG |   41104740.     184621.        223. |   87423310.     350031.        250. |    46318570.       112.7
FUEL COMB  |          0.         24.          0. |          0.         45.          0. |           0.         0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |           0.         0.0
MISC       |    3012096.      13577.        222. |    8071996.      36374.        222. |     5059900.       168.0
---------------------------------------------------------------------------------------------------------------
           |   86504100.    1310434.         66. |  156797300.    2053970.         76. |    70293220.        81.3


Results of Emission Projection for Region  16
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:36 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                     Base Year = 1980                    |                     Proj Year = 2000                    |
ID         |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |    %Chg
-------------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |       111       111         0         0       111   0.0 |       122        48         0         0        48  60.9 |   -56.9
CHEM MFG   |    108754     24323         0         0     24323  77.6 |    217606     42566         0         0     42566  80.4 |    75.0
SURF COATG |      3661      3549         0         0      3549   3.1 |      6153      4126         0         0      4126  32.9 |    16.3
FUEL COMB  |      5475      5475         0         0      5475   0.0 |      5660      5660         0         0      5660   0.0 |     3.4
SOLV PURCH |     68776     68776         0         0     68776   0.0 |    114329    114329         0         0    114329   0.0 |    66.2
MISC       |       788       738         0         0       738   6.3 |      1109      1025         0         0      1025   7.6 |    38.9
-------------------------------------------------------------------------------------------------------------------------------------
           |    187565    102972         0         0    102972  45.1 |    344980    167755         0         0    167755  51.4 |    62.9


Results of Cost Analysis for Region 16
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:36 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980              |         Proj Year = 2000               |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |          0.          0.          0. |      16740.         74.        225. |       16740.         0.0
CHEM MFG   |   -1048219.      84431.          0. |   -1854964.     175040.          0. |     -806745.         0.0
SURF COATG |      25424.        112.        227. |     341446.       2027.        168. |      316022.      1243.0
FUEL COMB  |          0.          0.          0. |          0.          0.          0. |           0.         0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |           0.         0.0
MISC       |      11364.         50.        227. |      18904.         84.        226. |        7540.        66.3
---------------------------------------------------------------------------------------------------------------
           |   -1011431.      84593.          0. |   -1477874.     177225.          0. |     -466443.         0.0
```

```
Results of Emission Projection for Region  17
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:36 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                Base Year = 1980                |                Proj Year = 2000                |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   216620    22611     8215     4282    26893  88.0 |   311410    22100    11353      735    22834  92.9 |  -15.1
CHEM MFG   |     3745     3745       43       43     3788   0.0 |     7316     7228       82        6     7234   2.2 |   91.0
SURF COATG |     2651     2651     2743     2743     5394   0.0 |     5035     3494     4955      800     4295  57.0 |  -20.4
FUEL COMB  |    79920    79920     4659     4659    84579   0.0 |    81689    81689     4639     4639    86327   0.0 |    2.1
SOLV PURCH |    35310    35310     4364     4364    39674   0.0 |    73138    73138     9039     9039    82177   0.0 |  107.1
MISC       |      328      328     1472     1472     1800   0.0 |      522      522     2409     2146     2668   9.0 |   48.2
-------------------------------------------------------------------------------------------------------------------------
           |   338574   144565    21496    17563   162128  55.0 |   479109   188171    32477    17365   205536  59.8 |   26.8
```

```
Results of Cost Analysis for Region 17
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:36 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |         Base Year = 1980              |          Proj Year = 2000             |
ID         |        Cost   Emis Red    Cost Eff |        Cost   Emis Red    Cost Eff |        Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |  461402800.    197942.       2331. |  671692200.    299928.       2240. |     210289300.       45.6
CHEM MFG   |          0.         0.          0. |     235439.       164.       1438. |        235439.        0.0
SURF COATG |          0.         0.          0. |    1652439.      5695.        290. |       1652439.        0.0
FUEL COMB  |          0.         0.          0. |          0.         0.          0. |             0.        0.0
SOLV PURCH |          0.         0.          0. |          0.         0.          0. |             0.        0.0
MISC       |          0.         0.          0. |      58375.       263.        222. |         58375.        0.0
--------------------------------------------------------------------------------------------------------------
           |  461402800.    197942.       2331. |  673638400.    306049.       2201. |     212235600.       46.0
```

```
Results of Emission Projection for Region  18
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:37 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                Base Year = 1980                |                Proj Year = 2000                |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     1906      573    41135    20019    20592  52.2 |     2979      396    61515     4439     4834  92.5 |  -76.5
CHEM MFG   |     7839     4842   157562    69345    74187  55.1 |    12466     9837   336847     4652    14490  95.9 |  -80.5
SURF COATG |     1776     1662    40529    18404    20066  52.6 |     3458     1497    80707     4017     5514  93.4 |  -72.5
FUEL COMB  |     1822      367     5630     5232     5599  24.9 |     3253      958     6785     5534     6492  35.3 |   15.9
SOLV PURCH |     3533     3533    46945    46945    50478   0.0 |     7092     7092    94231    94231   101322   0.0 |  100.7
MISC       |     2512     1057    19668     6969     8026  63.8 |     4445     1191    33894     7638     8828  77.0 |   10.0
-------------------------------------------------------------------------------------------------------------------------
           |    19388    12034   311469   166914   178948  45.9 |    33693    20970   613979   120510   141480  78.2 |  -20.9
```

```
Results of Cost Analysis for Region 18
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:37 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |         Base Year = 1980              |          Proj Year = 2000             |
ID         |        Cost   Emis Red    Cost Eff |        Cost   Emis Red    Cost Eff |        Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |   45137620.     22449.       2011. |  155974800.     59659.       2614. |     110837200.      245.6
CHEM MFG   |    3465031.     91214.         38. |   53873780.    334824.        161. |      50408750.     1454.8
SURF COATG |    3892722.     22239.        175. |   23126700.     78652.        294. |      19233980.      494.1
FUEL COMB  |          0.      1853.          0. |          0.      3546.          0. |             0.        0.0
SOLV PURCH |          0.         0.          0. |          0.         0.          0. |             0.        0.0
MISC       |    3150084.     14154.        223. |    6858591.     29511.        232. |       3708507.      117.7
--------------------------------------------------------------------------------------------------------------
           |   55645460.    151909.        366. |  239833900.    506192.        474. |     184188400.      331.0
```

```
Results of Emission Projection for Region  19
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:37 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                |                 Proj Year = 2000                |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr  LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr  LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   700999   103958   103958 85.2 |        0        0  1172287    14262    14262 98.8 |  -86.3
CHEM MFG    |        0        0   955331   176474   176474 81.5 |        0        0  2752341     7175     7175 99.7 |  -95.9
SURF COATG  |        0        0    12269    10850    10850 11.6 |        0        0    20421     3297     3297 83.9 |  -69.6
FUEL COMB   |        0        0    36288    31269    31269 13.8 |        0        0    40711    35677    35677 12.4 |   14.1
SOLV PURCH  |        0        0    39957    39957    39957  0.0 |        0        0    71941    71941    71941  0.0 |   80.0
MISC        |        0        0    10728    10212    10212  4.8 |        0        0    18069     3568     3568 80.3 |  -65.1
-------------------------------------------------------------------------------------------------------------------------------
            |        0        0  1755572   372720   372720 78.8 |        0        0  4075770   135921   135921 96.7 |  -63.5
```

```
Results of Cost Analysis for Region 19
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:37 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 2000          |
ID          |        Cost    Emis Red   Cost Eff |        Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   | 1214326000.     597041.      2034. | 4629062000.    1158024.      3997. | 3414736000.      281.2
CHEM MFG    |   71472330.     778857.        92. |  249358400.    2745166.        91. |  177886100.      248.9
SURF COATG  |     322113.       1419.       227. |    3887020.      17123.       227. |    3564907.     1106.7
FUEL COMB   |          0.       5019.         0. |          0.       5034.         0. |          0.        0.0
SOLV PURCH  |          0.          0.         0. |          0.          0.         0. |          0.        0.0
MISC        |      95238.        516.       185. |    3188369.      14501.       220. |    3093131.     3247.8
------------------------------------------------------------------------------------------------------------
            | 1286216000.    1382852.       930. | 4885496000.    3939849.      1240. | 3599280000.      279.8
```

```
Results of Emission Projection for Region  20
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:37 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                |                 Proj Year = 2000                |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr  LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr  LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     5828     5600     6133     6133    11733  1.9 |    10192     4443    10576      907     5350 74.2 |  -54.4
CHEM MFG    |        0        0     2702     2702     2702  0.0 |        0        0     6241       56       56 99.1 |  -97.9
SURF COATG  |      177      177     6900     3630     3807 46.2 |      304      156    12010     1047     1203 90.2 |  -68.4
FUEL COMB   |      573      573      667      667     1240  0.0 |      998      998     1197     1197     2195  0.0 |   77.0
SOLV PURCH  |     7463     7463    13860    13860    21323  0.0 |    15931    15931    29587    29587    45518  0.0 |  113.5
MISC        |      648      648      194      191      839  0.4 |     1040     1040      423       48     1088 25.7 |   29.6
-------------------------------------------------------------------------------------------------------------------------------
            |    14689    14461    30456    27183    41644  7.8 |    28465    22569    60034    32842    55410 37.4 |   33.1
```

```
Results of Cost Analysis for Region 20
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:37 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 2000          |
ID          |        Cost    Emis Red   Cost Eff |        Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |     531468.        228.      2331. |    3314087.      15418.       215. |    2782619.      523.6
CHEM MFG    |          0.          0.         0. |    1513367.       6185.       245. |    1513367.        0.0
SURF COATG  |     742290.       3270.       227. |    3074556.      11110.       277. |    2332266.      314.2
FUEL COMB   |          0.          0.         0. |          0.          0.         0. |          0.        0.0
SOLV PURCH  |          0.          0.         0. |          0.          0.         0. |          0.        0.0
MISC        |        258.          3.        86. |      78646.        376.       209. |      78388.    30382.9
------------------------------------------------------------------------------------------------------------
            |    1274016.       3501.       364. |    7980656.      33088.       241. |    6706640.      526.4
```

```
Results of Emission Projection for Region  21
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:38 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                    |                  Proj Year = 2000                     |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   266372    32364        0        0    32364   87.9 |   409903    19780        0        0    19780   95.2 |  -38.9
CHEM MFG    |    69931     3582        0        0     3582   94.9 |   120512     6191        0        0     6191   94.9 |   72.8
SURF COATG  |    22226    19548       85       85    19633   12.0 |    31811    19828      117       18    19846   37.8 |    1.1
FUEL COMB   |     2559     2559       24       24     2583    0.0 |     3168     3168       29       29     3197    0.0 |   23.8
SOLV PURCH  |    64450    64450      641      641    65091    0.0 |   112805   112805     1122     1122   113927    0.0 |   75.0
MISC        |    64555    18928     1454      257    19185   70.9 |    95348    22108     1584       74    22182   77.1 |   15.6
--------------------------------------------------------------------------------------------------------------------------
            |   490093   141431     2204     1007   142438   71.1 |   773547   183880     2853     1244   185123   76.2 |   30.0
```

```
Results of Cost Analysis for Region 21
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:38 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |          Proj Year = 2000             |
ID          |          Cost    Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |      5568460.    234008.        24.  |     10044900.    390123.        26.  |     4476440.       80.4
CHEM MFG    |    116262600.     66349.      1752.  |    207853700.    114321.      1818.  |    91591150.       78.8
SURF COATG  |      1356315.      2678.       506.  |      9031432.     12082.       748.  |     7675117.      565.9
FUEL COMB   |            0.         0.         0.  |            0.        -0.         0.  |           0.        0.0
SOLV PURCH  |            0.         0.         0.  |            0.         0.         0.  |           0.        0.0
MISC        |      9935896.     46824.       212.  |     16084980.     74750.       215.  |     6149084.       61.9
------------------------------------------------------------------------------------------------------------
            |    133123300.    349859.       381.  |    243015100.    591276.       411.  |   109891800.       82.5
```

```
Results of Emission Projection for Region  22
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:38 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                    |                  Proj Year = 2000                     |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    13399    10197    10197   23.9 |        0        0    19614      850      850   95.7 |  -91.7
CHEM MFG    |        0        0     8511     8498     8498    0.2 |        0        0    12434      171      171   98.6 |  -98.0
SURF COATG  |        0        0    43410    42534    42534    2.0 |        0        0    59322    11461    11461   80.7 |  -73.1
FUEL COMB   |        0        0    30471    30471    30471    0.0 |        0        0    45106    45106    45106    0.0 |   48.0
SOLV PURCH  |        0        0   160850   160850   160850    0.0 |        0        0   349831   349831   349831    0.0 |  117.5
MISC        |        0        0    14104    14078    14078    0.2 |        0        0    24472     3107     3107   87.3 |  -77.9
--------------------------------------------------------------------------------------------------------------------------
            |        0        0   270745   266628   266628    1.5 |        0        0   510778   410526   410526   19.6 |   54.0
```

```
Results of Cost Analysis for Region 22
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:38 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |          Proj Year = 2000             |
ID          |          Cost    Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |      3317382.      3202.      1036.  |     12711150.     18764.       677.  |     9393764.      283.2
CHEM MFG    |         2886.        13.       222.  |      9745499.     12262.       795.  |     9742613.   337581.9
SURF COATG  |      -218889.       876.         0.  |     26138620.     47862.       546.  |    26357510.        0.0
FUEL COMB   |            0.         0.         0.  |            0.         0.         0.  |           0.        0.0
SOLV PURCH  |            0.         0.         0.  |            0.         0.         0.  |           0.        0.0
MISC        |         4446.        26.       171.  |      7406033.     21365.       347.  |     7401587.   166477.4
------------------------------------------------------------------------------------------------------------
            |      3105825.      4117.       754.  |     56001300.    100253.       559.  |    52895480.     1703.1
```

```
Results of Emission Projection for Region  23
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:38 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                 |                 Proj Year = 2000                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   394595    34773    34773  91.2 |        0        0   538681     7661     7661  98.6 |  -78.0
CHEM MFG    |        0        0    34445    34384    34384   0.2 |        0        0    63221      697      697  98.9 |  -98.0
SURF COATG  |        0        0   145042   135825   135825   6.4 |        0        0   238947    38676    38676  83.8 |  -71.5
FUEL COMB   |        0        0    13960    13960    13960   0.0 |        0        0    15351    15351    15351   0.0 |   10.0
SOLV PURCH  |        0        0   261240   261240   261240   0.0 |        0        0   489184   489184   489184   0.0 |   87.3
MISC        |        0        0    36112    23412    23412  35.2 |        0        0    48996    18683    18683  61.9 |  -20.2
--------------------------------------------------------------------------------------------------------------------------------
            |        0        0   885394   503594   503594  43.1 |        0        0  1394379   570252   570252  59.1 |   13.2
```

```
Results of Cost Analysis for Region 23
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:38 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |          Proj Year = 2000          |
ID          |         Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |     Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |   838745100.    359822.      2331. | 2434747000.    531020.      4585. | 1596002000.      190.3
CHEM MFG    |       13542.        61.       222. |   13106150.     62524.       210. |   13092610.    96681.5
SURF COATG  |     2075429.      9217.       225. |   64895630.    200271.       324. |   62820200.     3026.9
FUEL COMB   |           0.         0.         0. |          0.         0.         0. |          0.        0.0
SOLV PURCH  |           0.         0.         0. |          0.         0.         0. |          0.        0.0
MISC        |     3394086.     12700.       267. |    8199686.     30312.       271. |    4805600.      141.6
------------------------------------------------------------------------------------------------------------
            |   844228200.    381800.      2211. | 2520948000.    824127.      3059. | 1676720000.      198.6
```

```
Results of Emission Projection for Region  24
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:39 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                 |                 Proj Year = 2000                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    26778    24304        0        0    24304   9.2 |    33191    13476        0        0    13476  59.4 |  -44.6
CHEM MFG    |     2259     2236        0        0     2236   1.0 |     4244     4157        0        0     4157   2.0 |   85.9
SURF COATG  |    36824    34337        0        0    34337   6.8 |    77216    62613        0        0    62613  18.9 |   82.3
FUEL COMB   |     5396     5396        0        0     5396   0.0 |     6225     6225        0        0     6225   0.0 |   15.4
SOLV PURCH  |    92937    92937        0        0    92937   0.0 |   208861   208861        0        0   208861   0.0 |  124.7
MISC        |     1615     1599        0        0     1599   1.0 |     2775     2746        0        0     2746   1.0 |   71.7
--------------------------------------------------------------------------------------------------------------------------------
            |   165809   160809        0        0   160809   3.0 |   332512   298079        0        0   298079  10.4 |   85.4
```

```
Results of Cost Analysis for Region 24
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:39 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |          Proj Year = 2000          |
ID          |         Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |     Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |     2816847.      2474.      1139. |    3766715.     19715.       191. |     949868.       33.7
CHEM MFG    |        2760.        23.       120. |      41951.        87.       485. |      39191.     1420.0
SURF COATG  |     -535868.      2487.         0. |    4556634.     14603.       312. |    5092502.        0.0
FUEL COMB   |           0.         0.         0. |          0.         0.         0. |          0.        0.0
SOLV PURCH  |           0.         0.         0. |          0.         0.         0. |          0.        0.0
MISC        |           0.        16.         0. |          0.        29.         0. |          0.        0.0
------------------------------------------------------------------------------------------------------------
            |     2283739.      5000.       457. |    8365299.     34432.       243. |    6081560.      266.3
```

```
Results of Emission Projection for Region  25
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:39 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                 |                 Proj Year = 2000                |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    21851    21851        0         0    21851   0.0 |    25068    18572        0         0    18572  25.9 |  -15.0
CHEM MFG    |   109914     2680        0         0     2680  97.6 |   215491     4704        0         0     4704  97.8 |   75.5
SURF COATG  |    10399    10399        0         0    10399   0.0 |    20735    20019        0         0    20019   3.5 |   92.5
FUEL COMB   |    37088    37088        0         0    37088   0.0 |    48210    48210        0         0    48210   0.0 |   30.0
SOLV PURCH  |    57933    57933        0         0    57933   0.0 |   121219   121219        0         0   121219   0.0 |  109.2
MISC        |     4085     4085        0         0     4085   0.0 |     7752     7752        0         0     7752   0.0 |   89.8
-----------------------------------------------------------------------------------------------------------------------------
            |   241270   134036        0         0   134036  44.4 |   438474   220476        0         0   220476  49.7 |   64.5
```

```
Results of Cost Analysis for Region 25
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:39 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |           Proj Year = 2000          |
ID          |         Cost    Emis Red    Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |           0.          0.         0. |    -1120745.       6495.         0. |    -1120745.        0.0
CHEM MFG    |    -7291011.     107234.         0. |   -11074530.     210786.         0. |    -3783522.        0.0
SURF COATG  |           0.          0.         0. |      780235.        716.      1090. |      780235.        0.0
FUEL COMB   |           0.          0.         0. |           0.          0.         0. |           0.        0.0
SOLV PURCH  |           0.          0.         0. |           0.          0.         0. |           0.        0.0
MISC        |           0.          0.         0. |           0.          0.         0. |           0.        0.0
-----------------------------------------------------------------------------------------------------------
            |    -7291011.     107234.         0. |   -11415040.     217998.         0. |    -4124032.        0.0
```

```
Results of Emission Projection for Region  26
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:39 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                 |                 Proj Year = 2000                |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    56190     6224     7202      4618    10842  82.9 |    78626     5403     8971       616     6019  93.1 |  -44.5
CHEM MFG    |    53376    49170       21        21    49191   7.9 |    90960    84255       36         0    84255   7.4 |   71.3
SURF COATG  |   210081    55459    46672     46654   102113  60.2 |   334160   106318    76128      3027   109345  73.3 |    7.1
FUEL COMB   |     2253     2163      441       441     2604   3.3 |     3424     3291      646       618     3909   3.9 |   50.1
SOLV PURCH  |    92524    92524    37792     37792   130316   0.0 |   181554   181554    74157     74157   255710   0.0 |   96.2
MISC        |    42599    11941       66        66    12007  71.9 |    66695    19718       85        18    19735  70.4 |   64.4
-----------------------------------------------------------------------------------------------------------------------------
            |   457023   217481    92194     89592   307073  44.1 |   755419   400538   160023     78436   478974  47.7 |   56.0
```

```
Results of Cost Analysis for Region 26
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:39 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |           Proj Year = 2000          |
ID          |         Cost    Emis Red    Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |   105914600.      52550.      2016. |   153284800.      81578.      1879. |    47370240.       44.7
CHEM MFG    |      125146.       4206.        30. |      227448.       6741.        34. |      102302.       81.7
SURF COATG  |    34307510.     154640.       222. |    53135560.     300944.       177. |    18828050.       54.9
FUEL COMB   |           0.         90.         0. |           0.        160.         0. |           0.        0.0
SOLV PURCH  |           0.          0.         0. |           0.          0.         0. |           0.        0.0
MISC        |     6803634.      30658.       222. |    10436600.      47045.       222. |     3632961.       53.4
-----------------------------------------------------------------------------------------------------------
            |   147150900.     242144.       608. |   217084400.     436468.       497. |    69933570.       47.5
```

```
Results of Emission Projection for Region  27
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:39 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                  |                Proj Year = 2000                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    36087     9381        0        0     9381  74.0 |    53587     8507        0        0     8507  84.1 |   -9.3
CHEM MFG    |      131      131        0        0      131   0.0 |      229      229        0        0      229   0.0 |   74.7
FUEL COMB   |     2632     2632        0        0     2632   0.0 |     2963     2963        0        0     2963   0.0 |   12.6
SOLV PURCH  |     5079     5079        0        0     5079   0.0 |     9651     9651        0        0     9651   0.0 |   90.0
MISC        |     1351     1333        0        0     1333   1.3 |     1918     1894        0        0     1894   1.3 |   42.1
------------------------------------------------------------------------------------------------------------------------------
            |    45280    18556        0        0    18556  59.0 |    68347    23242        0        0    23242  66.0 |   25.3


Results of Cost Analysis for Region 27
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:39 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980            |            Proj Year = 2000         |
ID          |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |    61795050.     26706.      2314. |    96972420.     45080.      2151. |    35177370.       56.9
CHEM MFG    |           0.         0.         0. |           0.         0.         0. |           0.        0.0
FUEL COMB   |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH  |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC        |        3996.        18.       222. |        5507.        25.       222. |        1511.       37.8
---------------------------------------------------------------------------------------------------------------
            |    61799040.     26724.      2312. |    96977920.     45105.      2150. |    35178880.       56.9


Results of Emission Projection for Region  28
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:40 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                  |                Proj Year = 2000                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      933      933     2387     2330     3263   1.7 |     1111      456     3488      116      571  87.6 |  -82.5
CHEM MFG    |      485      485        0        0      485   0.0 |      814      814        0        0      814   0.0 |   67.8
SURF COATG  |    31591    31561    20235     9792    41353  20.2 |    66962    58509    40946     3843    62352  42.2 |   50.8
FUEL COMB   |     2097     2097      481      481     2578   0.0 |     2451     2451      475      475     2925   0.0 |   13.5
SOLV PURCH  |    13924    13924     4892     4892    18816   0.0 |    27339    27339     9605     9605    36945   0.0 |   96.3
MISC        |       64       64       10       10       74   0.0 |       93       93       15       11      103   4.1 |   39.8
------------------------------------------------------------------------------------------------------------------------------
            |    49094    49064    28005    17505    66569  13.7 |    98769    89661    54529    14050   103711  32.3 |   55.8


Results of Cost Analysis for Region 28
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:40 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980            |            Proj Year = 2000         |
ID          |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |      132867.        57.      2331. |     -105569.      4028.         0. |     -238436.     -179.5
CHEM MFG    |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SURF COATG  |     1725951.     10473.       165. |     9182075.     45555.       202. |     7456124.      432.0
FUEL COMB   |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH  |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC        |           0.         0.         0. |         986.         4.       222. |         986.        0.0
---------------------------------------------------------------------------------------------------------------
            |     1858818.     10530.       177. |     9077492.     49587.       183. |     7218674.      388.3
```

```
Results of Emission Projection for Region  29
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:40 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                  Proj Year = 2000                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      527      527     3980     1686     2213   50.9 |      932      473     8508      144      618   93.5 |  -72.1
SURF COATG  |     1181     1181        0        0     1181    0.0 |     3239     3239        0        0     3239    0.0 |  174.2
FUEL COMB   |       48       48      181      181      229    0.0 |       95       95      335      335      429    0.0 |   87.5
SOLV PURCH  |     1450     1450     1445     1445     2895    0.0 |     3694     3694     3681     3681     7375    0.0 |  154.7
MISC        |        0        0        1        1        1    0.0 |        0        0        2        0        0   80.0 |  -69.0
--------------------------------------------------------------------------------------------------------------------------------
            |     3206     3206     5607     3313     6519   26.0 |     7959     7501    12525     4160    11661   43.1 |   78.9
```

```
Results of Cost Analysis for Region 29
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:40 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 2000          |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |       Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |    1329053.      2294.       579. |    4468008.      8822.       506. |      3138955.      236.2
SURF COATG  |          0.         0.         0. |          0.         0.         0. |            0.        0.0
FUEL COMB   |          0.         0.         0. |          0.         0.         0. |            0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |            0.        0.0
MISC        |          0.         0.         0. |        275.         1.       222. |          275.        0.0
---------------------------------------------------------------------------------------------------------------
            |    1329053.      2294.       579. |    4468284.      8823.       506. |      3139231.      236.2
```

```
Results of Emission Projection for Region  30
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:40 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                  Proj Year = 2000                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    59410     3846     3846   93.5 |        0        0   125897      140      140   99.9 |  -96.4
CHEM MFG    |        0        0      526      526      526    0.0 |        0        0     1232        0        0  100.0 | -100.0
SURF COATG  |        0        0    21951    14618    14618   33.4 |        0        0    51738     3890     3890   92.5 |  -73.4
FUEL COMB   |        0        0      241      241      241    0.0 |        0        0      518      518      518    0.0 |  114.9
SOLV PURCH  |        0        0    27436    27436    27436    0.0 |        0        0    74267    74267    74267    0.0 |  170.7
MISC        |        0        0      632      632      632    0.0 |        0        0     1387      895      895   35.5 |   41.6
--------------------------------------------------------------------------------------------------------------------------------
            |        0        0   110196    47299    47299   57.1 |        0        0   255040    79710    79710   68.7 |   68.5
```

```
Results of Cost Analysis for Region 30
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:40 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 2000          |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |       Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |  122062900.     55564.      2197. |  552291500.    125756.      4392. |    430228500.      352.5
CHEM MFG    |          0.         0.         0. |     273609.      1232.       222. |       273609.        0.0
SURF COATG  |    3768585.      7333.       514. |   20533340.     47849.       429. |     16764760.      444.9
FUEL COMB   |          0.         0.         0. |          0.         0.         0. |            0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |            0.        0.0
MISC        |          0.         0.         0. |     132432.       492.       269. |       132432.        0.0
---------------------------------------------------------------------------------------------------------------
            |  125831500.     62897.      2001. |  573230800.    175330.      3269. |    447399300.      355.6
```

```
Results of Emission Projection for Region  31
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:41 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                 |                    Proj Year = 2000                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0   408286    48137    48137  88.2 |        0        0   523354    11153    11153  97.9 |  -76.8
CHEM MFG   |        0        0   147127    21362    21362  85.5 |        0        0   278536       57       57 100.0 |  -99.7
SURF COATG |        0        0    16779     9921     9921  40.9 |        0        0    29592     2452     2452  91.7 |  -75.3
FUEL COMB  |        0        0     8262     8160     8160   1.2 |        0        0    14146    14043    14043   0.7 |   72.1
SOLV PURCH |        0        0   200270   200270   200270   0.0 |        0        0   386746   386746   386746   0.0 |   93.1
MISC       |        0        0   250278    67189    67189  73.2 |        0        0   370254     9193     9193  97.5 |  -86.3
--------------------------------------------------------------------------------------------------------------------------------
           |        0        0  1031002   355039   355039  65.6 |        0        0  1602628   423645   423645  73.6 |   19.3
```

```
Results of Cost Analysis for Region 31
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:41 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |            Proj Year = 2000            |
ID         |        Cost     Emis Red    Cost Eff |         Cost     Emis Red    Cost Eff  |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |   456773800.     360149.       1268. |  1279384000.     512201.       2498.  |   822610000.       180.1
CHEM MFG   |     1302154.     125765.         10. |    12776460.     278479.         46.  |    11474310.       881.2
SURF COATG |     1572060.       6858.        229. |     5919825.      27140.        218.  |     4347765.       276.6
FUEL COMB  |          0.        102.          0. |          0.         102.          0.  |          0.          0.0
SOLV PURCH |          0.          0.          0. |          0.           0.          0.  |          0.          0.0
MISC       |    82684060.     183089.        452. |   156453000.     361061.        433.  |    73768970.        89.2
---------------------------------------------------------------------------------------------------------------
           |   542332000.     675963.        802. |  1454533000.    1178984.       1234.  |   912201100.       168.2
```

```
Results of Emission Projection for Region  32
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:41 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                 |                    Proj Year = 2000                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     9147     5195    23790    23790    28985  12.0 |    13619     3179    48062     1080     4259  93.1 |  -85.3
SURF COATG |      350        7        0        0        7  98.0 |      704       14        0        0       14  98.0 |  101.2
FUEL COMB  |    22641    22641       47       47    22688   0.0 |    25983    25983       96       96    26079   0.0 |   14.9
SOLV PURCH |     4603     4603     3921     3921     8524   0.0 |    11616    11616     9895     9895    21510   0.0 |  152.3
MISC       |      677      677        5        5      682   0.0 |     1276     1276        8        2     1277   0.5 |   87.3
--------------------------------------------------------------------------------------------------------------------------------
           |    37418    33123    27763    27763    60886   6.6 |    53198    42067    58061    11072    53139  52.2 |  -12.7
```

```
Results of Cost Analysis for Region 32
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:41 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |            Proj Year = 2000            |
ID         |        Cost     Emis Red    Cost Eff |         Cost     Emis Red    Cost Eff  |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |     9212112.       3952.       2331. |    12387950.      57422.        216.  |     3175840.        34.5
SURF COATG |     1346961.        343.       3927. |     2710759.        690.       3927.  |     1363798.       101.2
FUEL COMB  |          0.          0.          0. |          0.           0.          0.  |          0.          0.0
SOLV PURCH |          0.          0.          0. |          0.           0.          0.  |          0.          0.0
MISC       |          0.          0.          0. |        220.           7.         32.  |        220.          0.0
---------------------------------------------------------------------------------------------------------------
           |    10559070.       4295.       2458. |    15098930.      58120.        260.  |     4539857.        43.0
```

```
Results of Emission Projection for Region  33
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:41 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 2000                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1391     1279    24591    24591    25870   0.4 |     1501     1154    21863     8710     9865  57.8 |  -61.9
CHEM MFG    |      517      517     1151     1151     1668   0.0 |     1209      433     2229        0      433  87.4 |  -74.1
SURF COATG  |    15328    15328    26867    26867    42195   0.0 |    25170    24659    44088     8149    32808  52.6 |  -22.2
FUEL COMB   |     2564     2564     4055     4055     6619   0.0 |     3804     3804     6185     6185     9989   0.0 |   50.9
SOLV PURCH  |   126654   126654   225162   225162   351816   0.0 |   233753   233753   415559   415559   649312   0.0 |   84.6
MISC        |    32254    32254    35868    35404    67658   0.7 |    44944    44554    53363    30178    74732  24.0 |   10.5
------------------------------------------------------------------------------------------------------------------------------
            |   178708   178596   317694   317230   495826   0.1 |   310380   308356   543286   468782   777138   9.0 |   56.7
```

```
Results of Cost Analysis for Region 33
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:41 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |           Proj Year = 2000           |
ID          |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   |      -2688.        112.          0. |    1080273.      13499.         80. |    1082961.         0.0
CHEM MFG    |          0.          0.          0. |    1027541.       3005.        342. |    1027541.         0.0
SURF COATG  |          0.          0.          0. |    7962146.      36450.        218. |    7962146.         0.0
FUEL COMB   |          0.          0.          0. |          0.          0.          0. |          0.         0.0
SOLV PURCH  |          0.          0.          0. |          0.          0.          0. |          0.         0.0
MISC        |     225504.        464.        486. |   11418470.      23575.        484. |   11192970.      4963.5
-----------------------------------------------------------------------------------------------------------------
            |     222816.        576.        387. |   21488430.      76529.        281. |   21265620.      9544.0
```

```
Results of Emission Projection for Region  34
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:42 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 2000                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    36054     7996     5480     2098    10094  75.7 |    60240     8814    10390      167     8981  87.3 |  -11.0
CHEM MFG    |  1091207    39849     2283     2283    42132  96.1 |  2173511    82370     4769        1    82371  96.2 |   95.5
SURF COATG  |    40170    38793      819      819    39612   3.4 |    99603    64870     1723      170    65041  35.8 |   64.2
FUEL COMB   |     8050     8050      247      247     8297   0.0 |    12593    12593      311      311    12905   0.0 |   55.5
SOLV PURCH  |   128112   128112     6743     6743   134855   0.0 |   263856   263856    13888    13888   277744   0.0 |  106.0
MISC        |    59673    12454        0        0    12454  79.1 |    94748    17573        0        0    17573  81.5 |   41.1
------------------------------------------------------------------------------------------------------------------------------
            |  1363266   235254    15572    12190   247444  82.1 |  2704552   450078    31081    14536   464615  83.0 |   87.8
```

```
Results of Cost Analysis for Region 34
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:42 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |           Proj Year = 2000           |
ID          |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   |   30330310.      31440.        965. |  104331300.      61649.       1692. |   74000960.       244.0
CHEM MFG    |  -11556510.    1051358.          0. |  -19962790.    2095909.          0. |   -8406279.         0.0
SURF COATG  |     312579.       1377.        227. |    5668278.      36286.        156. |    5355699.      1713.4
FUEL COMB   |          0.          0.          0. |          0.         -0.          0. |          0.         0.0
SOLV PURCH  |          0.          0.          0. |          0.          0.          0. |          0.         0.0
MISC        |   21567230.      47219.        457. |   35700490.      77175.        463. |   14133260.        65.5
-----------------------------------------------------------------------------------------------------------------
            |   40653620.    1131394.         36. |  125737200.    2271019.         55. |   85083630.       209.3
```

```
Results of Emission Projection for Region  35
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:42 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |               Base Year = 1980                     |                Proj Year = 2000                     |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1340     1340        0         0     1340   0.0 |     1243      947        0         0      947  23.8 |  -29.3
FUEL COMB   |      601      601        0         0      601   0.0 |      948      948        0         0      948   0.0 |   57.8
SOLV PURCH  |     4186     4186        0         0     4186   0.0 |     8853     8853        0         0     8853   0.0 |  111.5
--------------------------------------------------------------------------------------------------------------------------------
            |     6127     6127        0         0     6127   0.0 |    11044    10748        0         0    10748   2.7 |   75.4
```

```
Results of Cost Analysis for Region 35
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:42 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980               |         Proj Year = 2000              |
ID          |        Cost     Emis Red     Cost Eff |         Cost   Emis Red    Cost Eff |       Abs Chg      Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |          0.           0.           0. |      -12284.       296.          0. |      -12284.           0.0
FUEL COMB   |          0.           0.           0. |           0.         0.          0. |           0.           0.0
SOLV PURCH  |          0.           0.           0. |           0.         0.          0. |           0.           0.0
--------------------------------------------------------------------------------------------------------------
            |          0.           0.           0. |      -12284.       296.          0. |      -12284.           0.0
```

```
Results of Emission Projection for Region  36
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:42 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |               Base Year = 1980                     |                Proj Year = 2000                     |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    93995     20404    20404  78.3 |        0        0   100887      5311     5311  94.7 |  -74.0
CHEM MFG    |        0        0    91620     23471    23471  74.4 |        0        0   155981      1835     1835  98.8 |  -92.2
SURF COATG  |        0        0   175053     93074    93074  46.8 |        0        0   291083     19920    19920  93.2 |  -78.6
FUEL COMB   |        0        0    25278     25278    25278   0.0 |        0        0    26785     26785    26785   0.0 |    6.0
SOLV PURCH  |        0        0   334152    334152   334152   0.0 |        0        0   606123    606123   606123   0.0 |   81.4
MISC        |        0        0    49990     21382    21382  57.2 |        0        0    63257      8928     8928  85.9 |  -58.2
--------------------------------------------------------------------------------------------------------------------------------
            |        0        0   770088    517761   517761  32.8 |        0        0  1244116    668900   668900  46.2 |   29.2
```

```
Results of Cost Analysis for Region 36
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:42 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980               |         Proj Year = 2000              |
ID          |        Cost     Emis Red     Cost Eff |         Cost   Emis Red    Cost Eff |       Abs Chg      Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |   24973600.       73591.         339. |    77305580.     95577.        809. |    52331970.         209.5
CHEM MFG    |    3310755.       68149.          49. |     9075783.    154146.         59. |     5765028.         174.1
SURF COATG  |   15385890.       81979.         188. |    63553160.    271163.        234. |    48167270.         313.1
FUEL COMB   |          0.           0.           0. |           0.         0.          0. |           0.           0.0
SOLV PURCH  |          0.           0.           0. |           0.         0.          0. |           0.           0.0
MISC        |    6288756.       28608.         220. |    11487380.     54329.        211. |     5198622.          82.7
--------------------------------------------------------------------------------------------------------------
            |   49959010.      252327.         198. |   161421900.    575216.        281. |   111462900.         223.1
```

```
Results of Emission Projection for Region  37
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:42 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                 |                   Proj Year = 2000                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    58888    48710   650426     5503    54213  92.4 |    68573    28943   690103     1751    30694  96.0 |  -43.4
CHEM MFG   |     6106     4648     1619     1619     6267  18.9 |    10699     8355     2869       50     8405  38.1 |   34.1
SURF COATG |   663776     1430     9173     4189     5619  99.2 |  1309424    10325    17976      126    10451  99.2 |   86.0
FUEL COMB  |    35147    35147     9836     9836    44983   0.0 |    40695    40695    11883    11883    52579   0.0 |   16.9
SOLV PURCH |    34992    34992     8288     8288    43280   0.0 |    84942    84942    20119    20119   105061   0.0 |  142.7
MISC       |     2178     2178     1994      905     3083  26.1 |     3357     3357     3433      250     3607  46.9 |   17.0
-------------------------------------------------------------------------------------------------------------------------------
           |   801087   127105   681336    30340   157445  89.4 |  1517691   176618   746383    34180   210797  90.7 |   33.9
```

```
Results of Cost Analysis for Region 37
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:43 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980          |          Proj Year = 2000          |
ID         |       Cost   Emis Red    Cost Eff |       Cost   Emis Red    Cost Eff |      Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM  |  56565800.    655101.         86. | 152608900.    727982.        210. |    96043060.      169.8
CHEM MFG   |   1331154.      1458.        913. |   4152656.      5163.        804. |     2821502.      212.0
SURF COATG | 118799200.    667330.        178. | 243554500.   1316949.        185. |   124755300.      105.0
FUEL COMB  |         0.         0.          0. |         0.         0.          0. |           0.        0.0
SOLV PURCH |         0.         0.          0. |         0.         0.          0. |           0.        0.0
MISC       |    241758.      1089.        222. |    517823.      3183.        163. |      276065.      114.2
-----------------------------------------------------------------------------------------------------------
           | 176937900.   1324978.        134. | 400833900.   2053277.        195. |   223896000.      126.5
```

```
Results of Emission Projection for Region  38
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:43 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                 |                   Proj Year = 2000                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   122071     6323      400       20     6343  94.8 |   215138    10849      705        2    10851  95.0 |   71.1
CHEM MFG   |    13331    13331     1112     1112    14443   0.0 |    25237    25237     1205        0    25237   4.6 |   74.7
SURF COATG |     3434     3434     4735     4735     8169   0.0 |     6390     5262    10720      269     5531  67.7 |  -32.3
FUEL COMB  |     7051     7051     2271     2271     9322   0.0 |     9981     9981     3312     3312    13293   0.0 |   42.6
SOLV PURCH |    34141    34141     8537     8537    42678   0.0 |    68665    68665    17170    17170    85835   0.0 |  101.1
MISC       |     3658     3658      536      536     4194   0.0 |     5823     5823      739      258     6081   7.3 |   45.0
-------------------------------------------------------------------------------------------------------------------------------
           |   183686    67938    17591    17211    85149  57.7 |   331234   125816    33851    21010   146826  59.8 |   72.4
```

```
Results of Cost Analysis for Region 38
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:43 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980          |          Proj Year = 2000          |
ID         |       Cost   Emis Red    Cost Eff |       Cost   Emis Red    Cost Eff |      Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM  | 270694400.    116128.       2331. | 477424700.    204993.       2329. |   206730300.       76.4
CHEM MFG   |         0.         0.          0. |    -16917.      1205.          0. |      -16917.        0.0
SURF COATG |         0.         0.          0. |   1836276.     11579.        159. |     1836276.        0.0
FUEL COMB  |         0.         0.          0. |         0.         0.          0. |           0.        0.0
SOLV PURCH |         0.         0.          0. |         0.         0.          0. |           0.        0.0
MISC       |         0.         0.          0. |    106936.       482.        222. |      106936.        0.0
-----------------------------------------------------------------------------------------------------------
           | 270694400.    116128.       2331. | 479351000.    218258.       2196. |   208656600.       77.1
```

```
Results of Emission Projection for Region  39
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:43 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                     |                Proj Year = 2000                     |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   231232    49846    49846  78.4 |        0        0   273457    11661    11661  95.7 |  -76.6
CHEM MFG    |        0        0    99770    16879    16879  83.1 |        0        0   166095      799      799  99.5 |  -95.3
SURF COATG  |        0        0   223368   126026   126026  43.6 |        0        0   346245    31735    31735  90.8 |  -74.8
FUEL COMB   |        0        0    14866    14746    14746   0.8 |        0        0    14052    13876    13876   1.3 |   -5.9
SOLV PURCH  |        0        0   295168   295168   295168   0.0 |        0        0   501209   501209   501209   0.0 |   69.8
MISC        |        0        0    61365    43464    43464  29.2 |        0        0    91172    18470    18470  79.7 |  -57.5
-------------------------------------------------------------------------------------------------------------------------------
            |        0        0   925769   546129   546129  41.0 |        0        0  1392229   577749   577749  58.5 |    5.8
```

```
Results of Cost Analysis for Region 39
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:43 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980              |          Proj Year = 2000              |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |  279040000.    181386.      1538. |  690214600.    261795.      2636. |   411174600.      147.4
CHEM MFG    |     190628.     82891.         2. |   28797420.    165297.       174. |    28606790.    15006.6
SURF COATG  |   26654080.     97342.       274. |   96830990.    314510.       308. |    70176910.      263.3
FUEL COMB   |          0.       120.         0. |          0.       176.         0. |           0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |           0.        0.0
MISC        |    3843936.     17901.       215. |   15881750.     72702.       218. |    12037820.      313.2
---------------------------------------------------------------------------------------------------------------
            |  309728600.    379640.       816. |  831724700.    814481.      1021. |   521996100.      168.5
```

```
Results of Emission Projection for Region  41
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:44 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                     |                Proj Year = 2000                     |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0     3265     3037     3037   7.0 |        0        0     5348      483      483  91.0 |  -84.1
CHEM MFG    |        0        0     8059      497      497  93.8 |        0        0     9436        0        0 100.0 | -100.0
SURF COATG  |        0        0    11578     8978     8978  22.5 |        0        0    16281     2297     2297  85.9 |  -74.4
FUEL COMB   |        0        0      149      149      149   0.0 |        0        0      219      219      219   0.0 |   47.0
SOLV PURCH  |        0        0    37388    37388    37388   0.0 |        0        0    69887    69887    69887   0.0 |   86.9
MISC        |        0        0      597      119      119  80.1 |        0        0      763       28       28  96.3 |  -76.5
-------------------------------------------------------------------------------------------------------------------------------
            |        0        0    61036    50168    50168  17.8 |        0        0   101933    72914    72914  28.5 |   45.3
```

```
Results of Cost Analysis for Region 41
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:44 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980              |          Proj Year = 2000              |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |     531468.       228.      2331. |    3273634.      4864.       673. |     2742166.      516.0
CHEM MFG    |    -113430.      7562.         0. |    -102129.      9436.         0. |       11301.        0.0
SURF COATG  |     512732.      2600.       197. |    5384447.     13983.       385. |     4871715.      950.1
FUEL COMB   |          0.         0.         0. |          0.         0.         0. |           0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |           0.        0.0
MISC        |      41108.       478.        86. |      82419.       735.       112. |       41311.      100.5
---------------------------------------------------------------------------------------------------------------
            |     971878.     10868.        89. |    8638370.     29018.       298. |     7666492.      788.8
```

```
Results of Emission Projection for Region  42
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:44 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                 Proj Year = 2000                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0    58275     8087     8087  86.1 |        0        0    87963     1067     1067  98.8 |  -86.8
CHEM MFG   |        0        0    95982    33475    33475  65.1 |        0        0   191566     2062     2062  98.9 |  -93.8
SURF COATG |        0        0   196094   160290   160290  18.3 |        0        0   420127    38670    38670  90.8 |  -75.9
FUEL COMB  |        0        0     4684     4684     4684   0.0 |        0        0     6683     6683     6683   0.0 |   42.7
SOLV PURCH |        0        0    70020    70020    70020   0.0 |        0        0   139311   139311   139311   0.0 |   99.0
MISC       |        0        0    27592    20581    20581  25.4 |        0        0    41388     6113     6113  85.2 |  -70.3
--------------------------------------------------------------------------------------------------------------------------
           |        0        0   452647   297137   297137  34.4 |        0        0   887039   193907   193907  78.1 |  -34.7
```

```
Results of Cost Analysis for Region 42
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:44 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |           Proj Year = 2000           |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |   21976620.      50188.        438. |   45427420.      86897.        523. |   23450800.       106.7
CHEM MFG   |   -1789561.      62507.          0. |     753929.     189503.          4. |    2543491.         0.0
SURF COATG |   11232350.      35804.        314. |  138101500.     381457.        362. |  126869200.      1129.5
FUEL COMB  |          0.          0.          0. |          0.          0.          0. |          0.         0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |          0.         0.0
MISC       |     602946.       7011.         86. |    3413099.      35274.         97. |    2810153.       466.1
-------------------------------------------------------------------------------------------------------------
           |   32022360.     155510.        206. |  187696000.     693132.        271. |  155673600.       486.1
```

```
Results of Emission Projection for Region  43
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:44 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                 Proj Year = 2000                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     1672     1672        0        0     1672   0.0 |     2276      861        0        0      861  62.2 |  -48.5
FUEL COMB  |      194      194        0        0      194   0.0 |      311      311        0        0      311   0.0 |   60.4
SOLV PURCH |     6538     6538        0        0     6538   0.0 |    14638    14638        0        0    14638   0.0 |  123.9
MISC       |     1162     1162        0        0     1162   0.0 |     1738     1738        0        0     1738   0.0 |   49.6
--------------------------------------------------------------------------------------------------------------------------
           |     9566     9566        0        0     9566   0.0 |    18963    17548        0        0    17548   7.5 |   83.4
```

```
Results of Cost Analysis for Region 43
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:44 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |           Proj Year = 2000           |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |          0.          0.          0. |    -220209.       1415.          0. |    -220209.         0.0
FUEL COMB  |          0.          0.          0. |          0.          0.          0. |          0.         0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |          0.         0.0
MISC       |          0.          0.          0. |          0.          0.          0. |          0.         0.0
-------------------------------------------------------------------------------------------------------------
           |          0.          0.          0. |    -220209.       1415.          0. |    -220209.         0.0
```

```
Results of Emission Projection for Region  44
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:45 AM, Wednesday August 26, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year - 1980                 |                  Proj Year - 2000                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0    18214     8070     8070  55.7 |        0        0    30481     1540     1540  94.9 |  -80.9
CHEM MFG   |        0        0   864272    60147    60147  93.0 |        0        0  1502115     7281     7281  99.5 |  -87.9
SURF COATG |        0        0   100250    60459    60459  39.7 |        0        0   193885    15541    15541  92.0 |  -74.3
FUEL COMB  |        0        0    17364    17364    17364   0.0 |        0        0    26468    26468    26468   0.0 |   52.4
SOLV PURCH |        0        0    87525    87525    87525   0.0 |        0        0   176215   176215   176215   0.0 |  101.3
MISC       |        0        0    85849    11801    11801  86.3 |        0        0   151955     5042     5042  96.7 |  -57.3
------------------------------------------------------------------------------------------------------------------------------
           |        0        0  1173474   245366   245366  79.1 |        0        0  2081118   232087   232087  88.8 |   -5.4


Results of Cost Analysis for Region 44
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:45 AM, Wednesday August 26, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year - 1980           |           Proj Year - 2000           |
ID         |        Cost    Emis Red  Cost Eff |         Cost    Emis Red  Cost Eff |      Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM  |   23363040.      10144.     2303. |    85306410.      28940.     2948. |    61943360.      265.1
CHEM MFG   |   17911160.     804125.       22. |    36501360.    1494834.       24. |    18590200.      103.8
SURF COATG |   22261760.      39791.      559. |    82617250.     178344.      463. |    60355490.      271.1
FUEL COMB  |          0.          0.        0. |           0.          0.        0. |           0.        0.0
SOLV PURCH |          0.          0.        0. |           0.          0.        0. |           0.        0.0
MISC       |    6529968.      74048.       88. |    14847970.     146913.      101. |     8318003.      127.4
------------------------------------------------------------------------------------------------------------
           |   70065930.     928108.       75. |   219273000.    1849031.      119. |   149207100.      213.0


Results of Emission Projection for Region  45
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:45 AM, Wednesday August 26, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year - 1980                 |                  Proj Year - 2000                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   938580   158438  1948311   151939   310377  89.2 |  1135974    99867  2354708    31697   131564  96.2 |  -57.6
CHEM MFG   |  6636224   216664  2744492   119028   335692  96.4 | 13637567   442114  5746050     3088   445202  97.7 |   32.6
SURF COATG |    87575    85202    30085    29745   114947   2.3 |   175990   169954    60356     8256   178211  24.6 |   55.0
FUEL COMB  |   360485   320582   153735   153636   474218   7.8 |   393045   330911   156029   148076   478987  12.8 |    1.0
SOLV PURCH |   146774   146774    75611    75611   222385   0.0 |   304254   304254   156737   156737   460992   0.0 |  107.3
MISC       |   126954   120659    10659     7652   128311   6.8 |   253524   238982    19822     5125   244107  10.7 |   90.2
------------------------------------------------------------------------------------------------------------------------------
           |  8296592  1048319  4962893   537611  1585930  88.0 | 15900353  1586084  8493701   352980  1939064  92.1 |   22.3


Results of Cost Analysis for Region 45
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:45 AM, Wednesday August 26, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year - 1980           |           Proj Year - 2000           |
ID         |        Cost    Emis Red  Cost Eff |         Cost    Emis Red  Cost Eff |      Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM  |  922628700.    2576514.      358. |  2757409000.    3359117.      821. |  1834780000.      198.9
CHEM MFG   | 4227248000.    9045024.      467. |  8629071000.   18938410.      456. |  4401823000.      104.1
SURF COATG |    2824090.       2713.     1041. |    21184830.      58135.      364. |    18360740.      650.1
FUEL COMB  |          0.      40002.        0. |           0.      70087.        0. |           0.        0.0
SOLV PURCH |          0.          0.        0. |           0.          0.        0. |           0.        0.0
MISC       |    2387352.       9302.      257. |     8709249.      29239.      298. |     6321897.      264.8
------------------------------------------------------------------------------------------------------------
           | 5155088000.   11673560.      442. | 11416370000.   22454990.      508. |  6261285000.      121.5
```

```
Results of Emission Projection for Region  46
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:45 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                  |                Proj Year = 2000                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    13374     9026        6        6     9032  32.5 |    16214     5649        7        2     5651  65.2 |  -37.4
CHEM MFG    |      246      246        0        0      246   0.0 |      448      448        0        0      448   0.0 |   82.1
SURF COATG  |      170      170        0        0      170   0.0 |      404      404        0        0      404   0.0 |  137.7
FUEL COMB   |     6146     6146      818      323     6469   7.1 |     7721     7582     1454      671     8253  10.1 |   27.6
SOLV PURCH  |    17210    17210      351      351    17561   0.0 |    43882    43882      895      895    44777   0.0 |  155.0
MISC        |      370      370        2        2      372   0.0 |      745      745        3        1      745   0.4 |  100.4
-----------------------------------------------------------------------------------------------------------------------------
            |    37516    33168     1177      682    33850  12.5 |    69414    58710     2359     1569    60278  16.0 |   78.1
```

```
Results of Cost Analysis for Region 46
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:45 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980            |        Proj Year = 2000              |
ID          |        Cost   Emis Red   Cost Eff  |         Cost   Emis Red   Cost Eff   |    Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |    9214092.      4348.      2119.  |    13184550.     10570.      1247.   |   3970455.       43.1
CHEM MFG    |          0.         0.         0.  |           0.         0.         0.   |         0.        0.0
SURF COATG  |          0.         0.         0.  |           0.         0.         0.   |         0.        0.0
FUEL COMB   |          0.       495.         0.  |           0.       922.         0.   |         0.        0.0
SOLV PURCH  |          0.         0.         0.  |           0.         0.         0.   |         0.        0.0
MISC        |          0.         0.         0.  |         586.         3.       222.   |       586.        0.0
-----------------------------------------------------------------------------------------------------------
            |    9214092.      4843.      1903.  |    13185130.     11495.      1147.   |   3971041.       43.1
```

```
Results of Emission Projection for Region  47
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:46 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                  |                Proj Year = 2000                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0      536      384      384  28.4 |        0        0      936       18       18  98.1 |  -95.4
CHEM MFG    |        3        3       15       15       18   0.0 |        6        6       37        4       10  76.1 |  -43.4
SURF COATG  |     1697     1663     1154     1069     2732   4.2 |     2676     2453     1827      340     2793  38.0 |    2.2
FUEL COMB   |       61       61       67       67      128   0.0 |      105      105      114      114      219   0.0 |   71.3
SOLV PURCH  |     4094     4094     4094     4094     8188   0.0 |    10599    10599    10599    10599    21199   0.0 |  158.9
MISC        |      324      324      398      398      722   0.0 |      481      481      647      647     1129   0.0 |   56.3
-----------------------------------------------------------------------------------------------------------------------------
            |     6179     6145     6264     6027    12172   2.2 |    13868    13645    14161    11723    25368   9.5 |  108.4
```

```
Results of Cost Analysis for Region 47
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:46 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980            |        Proj Year = 2000              |
ID          |        Cost   Emis Red   Cost Eff  |         Cost   Emis Red   Cost Eff   |    Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |     354312.       152.      2331.  |     1430730.       918.      1558.   |   1076418.      303.8
CHEM MFG    |          0.         0.         0.  |         455.        33.        14.   |       455.        0.0
SURF COATG  |     129710.       119.      1090.  |      788427.      1710.       461.   |    658717.      507.8
FUEL COMB   |          0.         0.         0.  |           0.         0.         0.   |         0.        0.0
SOLV PURCH  |          0.         0.         0.  |           0.         0.         0.   |         0.        0.0
MISC        |          0.         0.         0.  |           0.         0.         0.   |         0.        0.0
-----------------------------------------------------------------------------------------------------------
            |     484022.       271.      1786.  |     2219613.      2661.       834.   |   1735591.      358.6
```

```
Results of Emission Projection for Region  48
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:46 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                 |                  Proj Year = 2000                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   115631     8798     5704     1960    10758  91.1 |   132367     7235    10427      364     7598  94.7 |   -29.4
CHEM MFG   |   426513    29475     1973     1973    31448  92.7 |   541215    45045     3895        6    45051  91.7 |    43.3
SURF COATG |    39019    32945     3054     3054    35999  14.4 |    77305    54936     6010      711    55648  33.2 |    54.6
FUEL COMB  |     4710     4710      511      511     5221   0.0 |     5847     5847      615      615     6462   0.0 |    23.8
SOLV PURCH |    72563    72563     8063     8063    80626   0.0 |   147174   147174    16354    16354   163527   0.0 |   102.8
MISC       |    20920    18953     2977     2977    21930   8.2 |    38397    33946     5329      582    34528  21.0 |    57.4
-----------------------------------------------------------------------------------------------------------------------------
           |   679356   167444    22282    18538   185982  73.5 |   942304   294183    42628    18630   312813  68.2 |    68.2
```

```
Results of Cost Analysis for Region 48
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:46 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980          |           Proj Year = 2000          |
ID         |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |       Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |    17607490.     110577.       159. |    63827890.     135196.       472. |     46220400.      262.5
CHEM MFG   |    -5517937.     397038.         0. |    -5298910.     500059.         0. |       219028.        0.0
SURF COATG |     1217473.       6074.       200. |     7069446.      27667.       256. |      5851973.      480.7
FUEL COMB  |           0.          0.         0. |           0.          0.         0. |            0.        0.0
SOLV PURCH |           0.          0.         0. |           0.          0.         0. |            0.        0.0
MISC       |      434838.       1967.       221. |     3187467.       9197.       347. |      2752629.      633.0
---------------------------------------------------------------------------------------------------------------
           |    13741870.     515656.        27. |    68785900.     672120.       102. |     55044030.      400.6
```

```
Results of Emission Projection for Region  49
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:46 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                 |                  Proj Year = 2000                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   141490    11641     8954     8596    20237  86.5 |   235354    10188    13757     2288    12476  95.0 |   -38.3
CHEM MFG   |    98597      509      398      349      858  99.1 |   273378     1419      895       70     1489  99.5 |    73.5
SURF COATG |      642      642     3349     3327     3969   0.6 |     1074     1011     5687      787     1799  73.4 |   -54.7
FUEL COMB  |     4983     4983     5221     4495     9478   7.1 |     7305     6765     7960     7288    14053   7.9 |    48.3
SOLV PURCH |    30571    30571    23063    23063    53634   0.0 |    62705    62705    47305    47305   110010   0.0 |   105.1
MISC       |    15336    11276     4716     4383    15659  21.9 |    24013    19281     8087     1744    21025  34.5 |    34.3
-----------------------------------------------------------------------------------------------------------------------------
           |   291619    59622    45701    44213   103835  69.2 |   603828   101369    83692    59483   160852  76.6 |    54.9
```

```
Results of Cost Analysis for Region 49
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:46 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980          |           Proj Year = 2000          |
ID         |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |       Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |     -717160.     130207.         0. |     -655969.     236634.         0. |        61191.        0.0
CHEM MFG   |    -1457061.      98137.         0. |    -3638148.     272785.         0. |     -2181087.        0.0
SURF COATG |        4994.         22.       227. |     1154435.       4962.       233. |      1149441.    23016.4
FUEL COMB  |           0.        726.         0. |           0.       1212.         0. |            0.        0.0
SOLV PURCH |           0.          0.         0. |           0.          0.         0. |            0.        0.0
MISC       |      975246.       4393.       222. |     2531030.      11075.       229. |      1555784.      159.5
---------------------------------------------------------------------------------------------------------------
           |    -1193981.     233485.         0. |     -608652.     526668.         0. |       585329.        0.0
```

```
Results of Emission Projection for Region  50
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:47 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                    |                  Proj Year = 2000                    |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
---------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |       112      112         0         0      112   0.0 |      122       57         0         0       57  53.3 |   -49.2
CHEM MFG   |     99269      556         0         0      556  99.4 |   194805     1028         0         0     1028  99.5 |    84.9
FUEL COMB  |     10152    10152         0         0    10152   0.0 |     9589     9589         0         0     9589   0.0 |    -5.6
SOLV PURCH |     21768    21768         0         0    21768   0.0 |    38380    38380         0         0    38380   0.0 |    76.3
MISC       |     10786    10786         0         0    10786   0.0 |    15114     4816         0         0     4816  68.1 |   -55.4
---------------------------------------------------------------------------------------------------------------------------------
           |    142087    43374         0         0    43374  69.5 |   258009    53869         0         0    53869  79.1 |    24.2
```

```
Results of Cost Analysis for Region 50
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:47 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |         Proj Year = 2000              |
ID          |        Cost    Emis Red     Cost Eff |        Cost    Emis Red     Cost Eff |       Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------------
PETROLEUM   |          0.          0.          0. |      14397.         65.        222. |       14397.        0.0
CHEM MFG    |    7277019.      98713.         74. |   15236100.     193777.         79. |     7959083.      109.4
FUEL COMB   |          0.          0.          0. |          0.          0.          0. |          0.        0.0
SOLV PURCH  |          0.          0.          0. |          0.          0.          0. |          0.        0.0
MISC        |          0.          0.          0. |    2286132.      10298.        222. |     2286132.        0.0
------------------------------------------------------------------------------------------------------------------
            |    7277019.      98713.         74. |   17536630.     204140.         86. |    10259610.      141.0
```

```
Results of Emission Projection for Region  51
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:47 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                    |                  Proj Year = 2000                    |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
---------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |         0        0     20474     12043    12043  41.2 |        0        0     29149      2166     2166  92.6 |   -82.0
CHEM MFG   |         0        0     10221      8659     8659  15.3 |        0        0     19116       343      343  98.2 |   -96.0
SURF COATG |         0        0     68649     44623    44623  35.0 |        0        0     99102     11052    11052  88.8 |   -75.2
FUEL COMB  |         0        0      4906      4906     4906   0.0 |        0        0      6639      6639     6639   0.0 |    35.3
SOLV PURCH |         0        0    115263    115263   115263   0.0 |        0        0    208868    208868   208868   0.0 |    81.2
MISC       |         0        0     14851      6931     6931  53.3 |        0        0     26635      7147     7147  73.2 |     3.1
---------------------------------------------------------------------------------------------------------------------------------
           |         0        0    234364    192425   192425  17.9 |        0        0    389509    236215   236215  39.4 |    22.8
```

```
Results of Cost Analysis for Region 51
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:47 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |         Proj Year = 2000              |
ID          |        Cost    Emis Red     Cost Eff |        Cost    Emis Red     Cost Eff |       Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   18521100.       8431.       2197. |   62942380.      26983.       2333. |    44421280.      239.8
CHEM MFG    |     102568.       1562.         66. |    2647279.      18773.        141. |     2544711.     2481.0
SURF COATG  |    7347002.      24026.        306. |   33444460.      88050.        380. |    26097460.      355.2
FUEL COMB   |          0.          0.          0. |          0.          0.          0. |          0.        0.0
SOLV PURCH  |          0.          0.          0. |          0.          0.          0. |          0.        0.0
MISC        |      87912.       7920.         11. |     851921.      19488.         44. |      764009.      869.1
------------------------------------------------------------------------------------------------------------------
            |   26058580.      41939.        621. |   99886040.     153293.        652. |    73827460.      283.3
```

```
Results of Emission Projection for Region  52
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:47 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                        |                  Proj Year = 2000                       |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr     LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr     LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    18750    16983         0         0    16983   9.4 |    16269     7700         0         0     7700  52.7 |  -54.7
CHEM MFG    |       10        0         0         0        0 100.0 |       13        0         0         0        0 100.0 |    0.0
FUEL COMB   |    12318    12318         0         0    12318   0.0 |    11847    11847         0         0    11847   0.0 |   -3.8
SOLV PURCH  |     1102     1102         0         0     1102   0.0 |     2107     2107         0         0     2107   0.0 |   91.2
MISC        |     1552     1552         0         0     1552   0.0 |     2379     2214         0         0     2214   6.9 |   42.7
---------------------------------------------------------------------------------------------------------------------------------
            |    33732    31955         0         0    31955   5.3 |    32614    23868         0         0    23868  26.8 |  -25.3
```

```
Results of Cost Analysis for Region 52
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:47 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |          Proj Year = 2000            |
ID          |         Cost     Emis Red   Cost Eff |         Cost     Emis Red   Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |     2483699.        1767.      1406. |     2136613.        8569.       249. |    -347086.      -14.0
CHEM MFG    |        -150.          10.         0. |        -193.          13.         0. |        -43.        0.0
FUEL COMB   |           0.           0.         0. |           0.           0.         0. |          0.        0.0
SOLV PURCH  |           0.           0.         0. |           0.           0.         0. |          0.        0.0
MISC        |           0.           0.         0. |       36430.         164.       222. |      36430.        0.0
---------------------------------------------------------------------------------------------------------------
            |     2483549.        1777.      1398. |     2172850.        8746.       248. |    -310699.      -12.5
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:47 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                        |                  Proj Year = 2000                       |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr     LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr     LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826    850400  1269531  84.6 |  3038463   292559  7966820    172721   465280  95.8 |  -63.4
CHEM MFG    |  9029663   422308  6814311    668432  1090740  93.1 | 18001568   818228 13942507     32575   850803  97.3 |  -22.0
SURF COATG  |  1408711   394641  1728687   1210559  1605200  48.8 |  2683744   711066  3149432    283383   994450  83.0 |  -38.0
FUEL COMB   |   649795   607706   442590    433741  1041447   4.7 |   733166   666590   530047    510085  1176675   6.9 |   13.0
SOLV PURCH  |  1355797  1355797  3240896   3240896  4596693   0.0 |  2770817  2770817  6428562   6428562  9199378   0.0 |  100.1
MISC        |   439043   281284   993342    342087   623371  56.5 |   747130   458634  1545778    169103   627737  72.6 |    0.7
---------------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652   6746115 10226982  70.2 | 27974886  5717896 33563148   7596428 13314324  78.4 |   30.2
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:47 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |          Proj Year = 2000            |
ID          |         Cost     Emis Red   Cost Eff |         Cost     Emis Red   Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |  6192942000.     6988221.       886. | 18556110000.    10540000.      1761. | 12363170000.      199.6
CHEM MFG    |  4374478000.    14753230.       297. |  9213013000.    31093270.       296. |  4838535000.      110.6
SURF COATG  |   352367600.     1532198.       230. |  1360214000.     4838726.       281. |  1007846000.      286.0
FUEL COMB   |           0.       50938.         0. |           0.       86537.         0. |           0.        0.0
SOLV PURCH  |           0.           0.         0. |           0.           0.         0. |           0.        0.0
MISC        |   214639400.      809014.       265. |   442093100.     1665171.       265. |   227453700.      106.0
---------------------------------------------------------------------------------------------------------------
            | 11134430000.    24133600.       461. | 29571430000.    48223710.       613. | 18437010000.      165.6
```

```
Results of Emission Projection for Region  1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:48 AM, Wednesday August 26, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year - 1980                  |                  Proj Year - 2005                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    32766    25804    25804  21.2 |        0        0    39903     5167     5167  87.1 |  -80.0
CHEM MFG    |        0        0   432570    24913    24913  94.2 |        0        0   867547       61       61 100.0 |  -99.8
SURF COATG  |        0        0     2896     2050     2050  29.2 |        0        0     6386      224      224  96.5 |  -89.1
FUEL COMB   |        0        0    20614    20614    20614   0.0 |        0        0    23729    23729    23729   0.0 |   15.1
SOLV PURCH  |        0        0    80407    80407    80407   0.0 |        0        0   197759   197759   197759   0.0 |  145.9
MISC        |        0        0    23980    16441    16441  31.4 |        0        0    39863    12831    12831  67.8 |  -22.0
-----------------------------------------------------------------------------------------------------------------------------
            |        0        0   593233   170229   170229  71.3 |        0        0  1175187   239771   239771  79.6 |   40.9
```

```
Results of Cost Analysis for Region 1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:48 AM, Wednesday August 26, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year - 1980          |          Proj Year - 2005          |
ID          |       Cost    Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |   10315390.      6962.      1482. |   23534640.     34736.      678. |   13219260.      128.2
CHEM MFG    |   -6094305.    407657.         0. |  -11435290.    867486.        0. |   -5340988.        0.0
SURF COATG  |     192042.       846.       227. |    1439631.      6162.      234. |    1247589.      649.6
FUEL COMB   |          0.         0.         0. |          0.         0.        0. |          0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.        0. |          0.        0.0
MISC        |    1770546.      7539.       235. |    6199284.     27032.      229. |    4428738.      250.1
-----------------------------------------------------------------------------------------------------------
            |    6183668.    423004.        15. |   19738260.    935417.       21. |   13554590.      219.2
```

```
Results of Emission Projection for Region  3
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:48 AM, Wednesday August 26, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year - 1980                  |                  Proj Year - 2005                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      925      640     3386      961     1601  62.9 |     2164      704     7948       40      745  92.6 |  -53.5
CHEM MFG    |     2931      494      791      790     1284  65.5 |     4920      833     1874       36      869  87.2 |  -32.3
SURF COATG  |      645      645     2877     2877     3522   0.0 |     2150     1294     9583      102     1396  88.1 |  -60.4
FUEL COMB   |     3556     3556     5963     5963     9519   0.0 |     5919     5919     9346     9346    15264   0.0 |   60.4
SOLV PURCH  |     8473     8473    16447    16447    24920   0.0 |    26356    26356    51160    51160    77516   0.0 |  211.1
MISC        |      140      140       84       84      224   0.0 |      261      261      230       61      322  34.5 |   43.6
-----------------------------------------------------------------------------------------------------------------------------
            |    16670    13948    29548    27122    41070  11.1 |    41768    35367    80140    60745    96112  21.2 |  134.0
```

```
Results of Cost Analysis for Region 3
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:48 AM, Wednesday August 26, 1987
Defaults:  Growth - 0.0   %     Retire Rate - 5.0   %     Attn Fraction - Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year - 1980          |          Proj Year - 2005          |
ID          |       Cost    Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |    4115109.      2710.      1518. |   21326750.      9367.     2277. |   17211640.      418.3
CHEM MFG    |     -36333.      2438.         0. |     279279.      5925.       47. |     315612.        0.0
SURF COATG  |          0.         0.         0. |    8943549.     10336.      865. |    8943549.        0.0
FUEL COMB   |          0.         0.         0. |          0.         0.        0. |          0.        0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.        0. |          0.        0.0
MISC        |          0.         0.         0. |      37552.       169.      222. |      37552.        0.0
-----------------------------------------------------------------------------------------------------------
            |    4078776.      5148.       792. |   30587130.     25797.     1186. |   26508350.      649.9
```

```
Results of Emission Projection for Region  4
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:48 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                  Proj Year = 2005                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     8594     1488      300       37     1525  82.9 |     9740      861      415       15      876  91.4 |  -42.5
CHEM MFG   |    15716     7805    10350      153     7958  69.5 |    39847    19432    26746        0    19432  70.8 |  144.2
SURF COATG |     1383     1383      130      130     1513   0.0 |     3479     3464      327       16     3479   8.6 |  130.0
FUEL COMB  |    11914    11914      229      229    12143   0.0 |    13272    13272      244      244    13516   0.0 |   11.3
SOLV PURCH |    64229    64229     1311     1311    65540   0.0 |   162721   162721     3321     3321   166042   0.0 |  153.3
MISC       |     8071     1880        0        0     1880  76.7 |    22393     3972        0        0     3972  82.3 |  111.3
------------------------------------------------------------------------------------------------------------------------------
           |   109907    88699    12320     1860    90559  25.9 |   251453   203723    31053     3596   207319  26.6 |  128.9
```

```
Results of Cost Analysis for Region 4
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:48 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |          Proj Year = 2005            |
ID         |          Cost     Emis Red   Cost Eff |          Cost     Emis Red   Cost Eff |       Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |     16630290.        7369.      2257. |     19520800.        9279.      2104. |      2890510.        17.4
CHEM MFG   |      1081718.       18108.        60. |      3165738.       47161.        67. |      2084020.       192.7
SURF COATG |            0.           0.         0. |        87853.         327.       269. |        87853.         0.0
FUEL COMB  |            0.           0.         0. |            0.          -0.         0. |            0.         0.0
SOLV PURCH |            0.           0.         0. |            0.           0.         0. |            0.         0.0
MISC       |      1374402.        6191.       222. |      4089277.       18420.       222. |      2714875.       197.5
---------------------------------------------------------------------------------------------------------------
           |     19086410.       31668.       603. |     26863670.       75187.       357. |      7777258.        40.7
```

```
Results of Emission Projection for Region  5
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:49 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                  Proj Year = 2005                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0   935714   196609   196609  79.0 |        0        0  1475803    18731    18731  98.7 |  -90.5
CHEM MFG   |        0        0    34451    23334    23334  32.3 |        0        0    84948      132      132  99.8 |  -99.4
SURF COATG |        0        0   191901   127669   127669  33.5 |        0        0   513498     9302     9302  98.2 |  -92.7
FUEL COMB  |        0        0    48125    46406    46406   3.6 |        0        0    69396    66010    66010   4.9 |   42.2
SOLV PURCH |        0        0   426532   426532   426532   0.0 |        0        0  1134241  1134241  1134241   0.0 |  165.9
MISC       |        0        0   189824    27657    27657  85.4 |        0        0   372192    24475    24475  93.4 |  -11.5
------------------------------------------------------------------------------------------------------------------------------
           |        0        0  1826547   848207   848207  53.6 |        0        0  3650078  1252893  1252893  65.7 |   47.7
```

```
Results of Cost Analysis for Region 5
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:49 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |          Proj Year = 2005            |
ID         |          Cost     Emis Red   Cost Eff |          Cost     Emis Red   Cost Eff |       Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |    639971300.      739105.       866. |   2720191000.     1457072.      1867. |   2080220000.       325.0
CHEM MFG   |      1505059.       11117.       135. |     11436230.       84815.       135. |      9931175.       659.9
SURF COATG |     32424240.       64232.       505. |    241354500.      504196.       479. |    208930200.       644.4
FUEL COMB  |            0.        1719.         0. |            0.        3386.         0. |            0.         0.0
SOLV PURCH |            0.           0.         0. |            0.           0.         0. |            0.         0.0
MISC       |     35980550.      162167.       222. |     79022810.      347717.       227. |     43042260.       119.6
---------------------------------------------------------------------------------------------------------------
           |    709881200.      978340.       726. |   3052005000.     2397185.      1273. |   2342124000.       329.9
```

```
Results of Emission Projection for Region  6
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:49 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                      |                 Proj Year = 2005                      |
ID         | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     2122     1778     12469      1962      3740  74.4 |     4297      565     20948       292       857  96.6 |  -77.1
CHEM MFG   |     5657     3414      3221      1521      4935  44.4 |    24739    16402      8793        18     16420  51.0 |  232.7
SURF COATG |      483      483      6997      6430      6913   7.6 |      881      793     12746       828      1621  88.1 |  -76.5
FUEL COMB  |     4200     3583      3829      3658      7241   9.8 |     7076     5486      5983      4823     10310  21.1 |   42.4
SOLV PURCH |    16741    16741     19652     19652     36393   0.0 |    51715    51715     60708     60708    112423   0.0 |  208.9
MISC       |     3870     2963       999       999      3962  18.6 |     8459     6991      2194       991      7982  25.1 |  101.5
-------------------------------------------------------------------------------------------------------------------------------
           |    33073    28962     47167     34222     63184  21.3 |    97166    81953    111372     67660    149613  28.3 |  136.8


Results of Cost Analysis for Region 6
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:49 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |           Proj Year = 2005          |
ID         |         Cost   Emis Red    Cost Eff |         Cost   Emis Red    Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |     9759443.     10851.        899. |    42966760.     24387.       1762. |    33207310.      340.3
CHEM MFG   |      493911.      3943.        125. |     2757750.     17112.        161. |     2263839.      458.3
SURF COATG |      128709.       567.        227. |     3178239.     12005.        265. |     3049530.     2369.3
FUEL COMB  |           0.       788.          0. |           0.      2749.          0. |           0.        0.0
SOLV PURCH |           0.         0.          0. |           0.         0.          0. |           0.        0.0
MISC       |      438954.       907.        484. |     1290122.      2671.        483. |      851168.      193.9
--------------------------------------------------------------------------------------------------------------
           |    10821020.     17056.        634. |    50192860.     58925.        852. |    39371850.      363.8


Results of Emission Projection for Region  7
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:49 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                      |                 Proj Year = 2005                      |
ID         | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0      3047       995       995  67.3 |        0        0      6110        16        16  99.7 |  -98.4
CHEM MFG   |        0        0     11761      3327      3327  71.7 |        0        0     33494         3         3 100.0 |  -99.9
SURF COATG |        0        0     53122     36053     36053  32.1 |        0        0    105497      2498      2498  97.6 |  -93.1
FUEL COMB  |        0        0       565       565       565   0.0 |        0        0      1006      1006      1006   0.0 |   78.1
SOLV PURCH |        0        0    100324    100324    100324   0.0 |        0        0    242727    242727    242727   0.0 |  141.9
MISC       |        0        0      4256      3046      3046  28.4 |        0        0      5700       247       247  95.7 |  -91.9
-------------------------------------------------------------------------------------------------------------------------------
           |        0        0    173075    144310    144310  16.6 |        0        0    394534    246496    246496  37.5 |   70.8


Results of Cost Analysis for Region 7
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:49 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |           Proj Year = 2005          |
ID         |         Cost   Emis Red    Cost Eff |         Cost   Emis Red    Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |      983585.      2052.        479. |     3450183.      6094.        566. |     2466598.      250.8
CHEM MFG   |     1388580.      8434.        165. |     5947395.     33492.        178. |     4558815.      328.3
SURF COATG |     4706528.     17069.        276. |    23811150.    102999.        231. |    19104620.      405.9
FUEL COMB  |           0.         0.          0. |           0.         0.          0. |           0.        0.0
SOLV PURCH |           0.         0.          0. |           0.         0.          0. |           0.        0.0
MISC       |      119596.      1210.         99. |      712041.      5453.        131. |      592445.      495.4
--------------------------------------------------------------------------------------------------------------
           |     7198289.     28765.        250. |    33920770.    148037.        229. |    26722480.      371.2
```

```
Results of Emission Projection for Region  8
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:50 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                  |                     Proj Year = 2005                 |
ID          | Unc Attn Ctr Attn   Unc MA   Ctr MA Tot Ctr   LOC | Unc Attn Ctr Attn   Unc MA   Ctr MA Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      192       40    14942     7000    7040  53.5 |      288       22    20146     1254    1276  93.8 |  -81.9
CHEM MFG    |     8825      809   312904     4190    4999  98.4 |    15056     1381   627078       52    1433  99.8 |  -71.3
SURF COATG  |        0        0    47712    12965   12965  72.8 |        0        0   108972      152     152  99.9 |  -98.8
FUEL COMB   |       57       57      176      176     233   0.0 |       93       93      322      322     416   0.0 |   78.4
SOLV PURCH  |      517      517    12402    12402   12919   0.0 |     1206     1206    28923    28923   30128   0.0 |  133.2
MISC        |      112      112    75436      342     454  99.4 |      159      159   152411        9     168  99.9 |  -62.9
--------------------------------------------------------------------------------------------------------------------------------
            |     9703     1535   463572    37075   38610  91.8 |    16803     2861   937853    30712   33573  96.5 |  -13.0
```

```
Results of Cost Analysis for Region 8
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:50 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980           |         Proj Year = 2005            |
ID          |         Cost    Emis Red  Cost Eff |         Cost    Emis Red  Cost Eff |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    18867110.       8094.     2331. |    68223250.      19158.     3561. |    49356140.       261.6
CHEM MFG    |    -4129055.     316730.        0. |    -3128969.     640701.        0. |     1000086.         0.0
SURF COATG  |     7887569.      34747.      227. |    24690870.     108821.      227. |    16803300.       213.0
FUEL COMB   |           0.          0.        0. |           0.          0.        0. |           0.         0.0
SOLV PURCH  |           0.          0.        0. |           0.          0.        0. |           0.         0.0
MISC        |    10776760.      75094.      144. |    21656110.     152402.      142. |    10879340.       101.0
-------------------------------------------------------------------------------------------------------------------
            |    33402390.     434665.       77. |   111441300.     921082.      121. |    78038870.       233.6
```

```
Results of Emission Projection for Region  9
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:50 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                  |                     Proj Year = 2005                 |
ID          | Unc Attn Ctr Attn   Unc MA   Ctr MA Tot Ctr   LOC | Unc Attn Ctr Attn   Unc MA   Ctr MA Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0      210       21      21  90.0 |        0        0      273        2       2  99.2 |  -90.1
SURF COATG  |        0        0      171      150     150  12.3 |        0        0      325        7       7  97.9 |  -95.4
FUEL COMB   |        0        0       37       37      37   0.0 |        0        0       52       52      52   0.0 |   41.3
SOLV PURCH  |        0        0     5182     5182    5182   0.0 |        0        0    11256    11256   11256   0.0 |  117.2
MISC        |        0        0      758      758     758   0.0 |        0        0     1475      100     100  93.2 |  -86.8
--------------------------------------------------------------------------------------------------------------------------------
            |        0        0     6358     6148    6148   3.3 |        0        0    13382    11418   11418  14.7 |   85.7
```

```
Results of Cost Analysis for Region 9
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:50 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980           |         Proj Year = 2005            |
ID          |         Cost    Emis Red  Cost Eff |         Cost    Emis Red  Cost Eff |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------------
PETROLEUM   |       69552.        189.      368. |       99825.        271.      368. |       30273.        43.5
SURF COATG  |        7398.         21.      352. |      228904.        318.      720. |      221506.      2994.1
FUEL COMB   |           0.          0.        0. |           0.          0.        0. |           0.         0.0
SOLV PURCH  |           0.          0.        0. |           0.          0.        0. |           0.         0.0
MISC        |           0.          0.        0. |      305279.       1375.      222. |      305279.         0.0
-------------------------------------------------------------------------------------------------------------------
            |       76950.        210.      366. |      634007.       1964.      323. |      557057.       723.9
```

```
Results of Emission Projection for Region  10
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:50 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                     |                  Proj Year = 2005                     |
ID         | Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC | Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     1274      1103      5211      4679      5782  10.8 |     2936      2148     11608       158      2306  84.1 |  -60.1
CHEM MFG   |        0         0      3032      3030      3030   0.1 |        0         0     10150         0         0 100.0 | -100.0
SURF COATG |      908       908      8633      7931      8839   7.4 |     2813      2382     26230       842      3224  88.9 |  -63.5
FUEL COMB  |     2661      2661      1036      1036      3697   0.0 |     4630      4630      1626      1626      6256   0.0 |   69.2
SOLV PURCH |    24556     24556     87063     87063    111619   0.0 |    73541     73541    260738    260738    334279   0.0 |  199.5
MISC       |        0         0      1204       135       135  88.8 |        0         0      2820       241       241  91.5 |   78.6
-----------------------------------------------------------------------------------------------------------------------------
           |    29399     29228    106179    103874    133102   1.8 |    83920     82701    313172    263606    346306  12.8 |  160.2
```

```
Results of Cost Analysis for Region 10
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:50 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980          |          Proj Year = 2005          |
ID         |        Cost    Emis Red   Cost Eff |        Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |    1638693.        703.      2331. |    9079902.      12238.       742. |     7441209.      454.1
CHEM MFG   |        -30.          2.         0. |    2251924.      10150.       222. |     2251954.        0.0
SURF COATG |     159354.        702.       227. |    6080811.      25819.       236. |     5921457.     3715.9
FUEL COMB  |          0.          0.         0. |          0.          0.         0. |           0.        0.0
SOLV PURCH |          0.          0.         0. |          0.          0.         0. |           0.        0.0
MISC       |     194214.       1069.       182. |     483057.       2579.       187. |      288843.      148.7
---------------------------------------------------------------------------------------------------------------
           |    1992231.       2476.       805. |   17895690.      50786.       352. |    15903460.      798.3
```

```
Results of Emission Projection for Region  11
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:51 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                     |                  Proj Year = 2005                     |
ID         | Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC | Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0         0     20368      3222      3222  84.2 |        0         0     30860       276       276  99.1 |  -91.4
CHEM MFG   |        0         0      5541      1505      1505  72.8 |        0         0     13216        10        10  99.9 |  -99.3
SURF COATG |        0         0     15742     15588     15588   1.0 |        0         0     37747      1909      1909  94.9 |  -87.8
FUEL COMB  |        0         0      9449      9449      9449   0.0 |        0         0     16740     16740     16740   0.0 |   77.2
SOLV PURCH |        0         0    121011    121011    121011   0.0 |        0         0    280316    280316    280316   0.0 |  131.6
MISC       |        0         0     15388      1507      1507  90.2 |        0         0     23801       822       822  96.5 |  -45.5
-----------------------------------------------------------------------------------------------------------------------------
           |        0         0    187499    152282    152282  18.8 |        0         0    402680    300072    300072  25.5 |   97.1
```

```
Results of Cost Analysis for Region 11
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:51 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980          |          Proj Year = 2005          |
ID         |        Cost    Emis Red   Cost Eff |        Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |   10091110.      17146.       589. |   52632600.      30585.      1721. |    42541490.      421.6
CHEM MFG   |     490829.       4036.       122. |    5072416.      13206.       384. |     4581587.      933.4
SURF COATG |      34958.        154.       227. |    8135372.      35839.       227. |     8100414.    23171.8
FUEL COMB  |          0.          0.         0. |          0.          0.         0. |           0.        0.0
SOLV PURCH |          0.          0.         0. |          0.          0.         0. |           0.        0.0
MISC       |    3023910.      13881.       218. |    4974020.      22979.       216. |     1950110.       64.5
---------------------------------------------------------------------------------------------------------------
           |   13640810.      35217.       387. |   70814410.     102608.       690. |    57173600.      419.1
```

```
Results of Emission Projection for Region  13
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:51 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                     |                  Proj Year = 2005                     |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      599      599        0         0      599    0.0 |      907      205        0         0      205   77.4 |  -65.7
CHEM MFG    |      236      236        0         0      236    0.0 |      589      589        0         0      589    0.0 |  149.4
FUEL COMB   |     1551     1551        0         0     1551    0.0 |     2555     2555        0         0     2555    0.0 |   64.7
SOLV PURCH  |    12392    12392        0         0    12392    0.0 |    30587    30587        0         0    30587    0.0 |  146.8
MISC        |     3000     3000        0         0     3000    0.0 |     5034     5034        0         0     5034    0.0 |   67.8
-------------------------------------------------------------------------------------------------------------------------------
            |    17778    17778        0         0    17778    0.0 |    39672    38970        0         0    38970    1.8 |  119.2
```

```
Results of Cost Analysis for Region 13
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:51 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980             |             Proj Year = 2005           |
ID          |          Cost     Emis Red    Cost Eff |           Cost     Emis Red    Cost Eff |     Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |            0.           0.          0. |       -103769.         702.          0. |   -103769.         0.0
CHEM MFG    |            0.           0.          0. |             0.           0.          0. |         0.         0.0
FUEL COMB   |            0.           0.          0. |             0.           0.          0. |         0.         0.0
SOLV PURCH  |            0.           0.          0. |             0.           0.          0. |         0.         0.0
MISC        |            0.           0.          0. |             0.           0.          0. |         0.         0.0
---------------------------------------------------------------------------------------------------------------
            |            0.           0.          0. |       -103769.         702.          0. |   -103769.         0.0
```

```
Results of Emission Projection for Region  14
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:51 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                     |                  Proj Year = 2005                     |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   224238     46435    46435   79.3 |        0        0   329208      3499     3499   98.9 |  -92.5
CHEM MFG    |        0        0    52015     13660    13660   73.7 |        0        0   113333       658      658   99.4 |  -95.2
SURF COATG  |        0        0   180144    132027   132027   26.7 |        0        0   331846      8438     8438   97.5 |  -93.6
FUEL COMB   |        0        0     6899      6899     6899    0.0 |        0        0     8025      8025     8025    0.0 |   16.3
SOLV PURCH  |        0        0   246769    246769   246769    0.0 |        0        0   466617    466617   466617    0.0 |   89.1
MISC        |        0        0    48734      9809     9809   79.9 |        0        0    44338       456      456   99.0 |  -95.4
-------------------------------------------------------------------------------------------------------------------------------
            |        0        0   758799    455599   455599   40.0 |        0        0  1293367    487692   487692   62.3 |    7.0
```

```
Results of Cost Analysis for Region 14
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:51 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980             |             Proj Year = 2005           |
ID          |          Cost     Emis Red    Cost Eff |           Cost     Emis Red    Cost Eff |     Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |    384486600.     177803.       2162. |    1310226000.     325710.       4023. |   925739600.      240.8
CHEM MFG    |      5529080.      38355.        144. |      26833750.     112675.        238. |    21304670.      385.3
SURF COATG  |      8659682.      48117.        180. |      89159890.     323408.        276. |    80500210.      929.6
FUEL COMB   |            0.          0.          0. !             0.          0.          0. |           0.        0.0
SOLV PURCH  |            0.          0.          0. |             0.          0.          0. |           0.        0.0
MISC        |      8638698.      38925.        222. |       9527724.      43882.        217. |      889026.       10.3
---------------------------------------------------------------------------------------------------------------
            |    407314000.     303200.       1343. |    1435748000.     805675.       1782. |  1028434000.      252.5
```

```
Results of Emission Projection for Region  15
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:52 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                  |                 Proj Year = 2005                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   156517    11491     3781     2322    13813  91.4 |   204392     8380     4886      172     8552  95.9 |   -38.1
CHEM MFG    |   267841    12558   718440     7996    20554  97.9 |   430887    20972  1184194      311    21283  98.7 |     3.5
SURF COATG  |   232564    51084     7519     4378    55462  76.9 |   471105    98671    14588      196    98867  79.6 |    78.3
FUEL COMB   |    10890    10866      308      308    11174   0.2 |    13385    13337      544      543    13880   0.3 |    24.2
SOLV PURCH  |   152202   152202    20755    20755   172957   0.0 |   338494   338494    46159    46159   384652   0.0 |   122.4
MISC        |    29461    16165      561      280    16445  45.2 |    51785    12342      933      103    12445  76.4 |   -24.3
------------------------------------------------------------------------------------------------------------------------------
            |   849475   254366   751364    36039   290405  81.9 |  1510048   492196  1251304    47484   539680  80.5 |    85.8
```

```
Results of Cost Analysis for Region 15
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:52 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980             |           Proj Year = 2005             |
ID          |         Cost     Emis Red     Cost Eff |         Cost     Emis Red     Cost Eff |       Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------
PETROLEUM   |    89383120.     146485.         610.  |   130537800.     200726.         650.  |     41154650.        46.0
CHEM MFG    |   -46995860.     965727.           0.  |   -60049000.    1593798.           0.  |    -13053140.         0.0
SURF COATG  |    41104740.     184621.         223.  |    97497040.     386826.         252.  |     56392300.       137.2
FUEL COMB   |           0.         24.           0.  |           0.         49.           0.  |            0.         0.0
SOLV PURCH  |           0.          0.           0.  |           0.          0.           0.  |            0.         0.0
MISC        |     3012096.      13577.         222.  |     8937313.      40273.         222.  |      5925217.       196.7
----------------------------------------------------------------------------------------------------------------
            |    86504100.    1310434.          66.  |   176923100.    2221672.          80.  |     90419020.       104.5
```

```
Results of Emission Projection for Region  16
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:52 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                  |                 Proj Year = 2005                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      111      111        0        0      111   0.0 |      130       32        0        0       32  75.2 |   -70.8
CHEM MFG    |   108754    24323        0        0    24323  77.6 |   237984    46553        0        0    46553  80.4 |    91.4
SURF COATG  |     3661     3549        0        0     3549   3.1 |     6953     4207        0        0     4207  39.5 |    18.6
FUEL COMB   |     5475     5475        0        0     5475   0.0 |     5745     5745        0        0     5745   0.0 |     4.9
SOLV PURCH  |    68776    68776        0        0    68776   0.0 |   128472   128472        0        0   128472   0.0 |    86.8
MISC        |      788      738        0        0      738   6.3 |     1212     1120        0        0     1120   7.6 |    51.7
------------------------------------------------------------------------------------------------------------------------------
            |   187565   102972        0        0   102972  45.1 |   380496   186130        0        0   186130  51.1 |    80.8
```

```
Results of Cost Analysis for Region 16
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:52 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980             |           Proj Year = 2005             |
ID          |         Cost     Emis Red     Cost Eff |         Cost     Emis Red     Cost Eff |       Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------
PETROLEUM   |           0.          0.           0.  |       22065.         98.         225.  |        22065.         0.0
CHEM MFG    |    -1048219.      84431.           0.  |    -1952615.     191431.           0.  |      -904396.         0.0
SURF COATG  |       25424.        112.         227.  |      455286.       2745.         166.  |       429862.      1690.8
FUEL COMB   |           0.          0.           0.  |           0.          0.           0.  |            0.         0.0
SOLV PURCH  |           0.          0.           0.  |           0.          0.           0.  |            0.         0.0
MISC        |       11364.         50.         227.  |       20833.         92.         225.  |         9469.        83.3
----------------------------------------------------------------------------------------------------------------
            |    -1011431.      84593.           0.  |    -1454431.     194366.           0.  |      -443000.         0.0
```

```
Results of Emission Projection for Region  17
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:52 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 2005                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   216620    22611     8215     4282    26893  88.0 |   333326    21839    12223      364    22203  93.6 |  -17.4
CHEM MFG    |     3745     3745       43       43     3788   0.0 |     8324     8207       94        3     8209   2.5 |  116.7
SURF COATG  |     2651     2651     2743     2743     5394   0.0 |     5829     3687     5694      336     4023  65.1 |  -25.4
FUEL COMB   |    79920    79920     4659     4659    84579   0.0 |    83034    83034     4516     4516    87550   0.0 |    3.5
SOLV PURCH  |    35310    35310     4364     4364    39674   0.0 |    85406    85406    10555    10555    95961   0.0 |  141.9
MISC        |      328      328     1472     1472     1800   0.0 |      585      585     2630     2299     2684  10.3 |   60.2
------------------------------------------------------------------------------------------------------------------------------
            |   338574   144565    21496    17563   162128  55.0 |   516504   202758    35712    18072   220830  60.0 |   36.2
```

```
Results of Cost Analysis for Region 17
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:52 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |           Proj Year = 2005          |
ID          |          Cost    Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |       Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |    461402800.     197942.      2331. |    719640700.     323346.      2226. |    258237900.       56.0
CHEM MFG    |            0.          0.         0. |       311605.        209.      1493. |       311605.        0.0
SURF COATG  |            0.          0.         0. |      2181626.       7500.       291. |      2181626.        0.0
FUEL COMB   |            0.          0.         0. |            0.          0.         0. |            0.        0.0
SOLV PURCH  |            0.          0.         0. |            0.          0.         0. |            0.        0.0
MISC        |            0.          0.         0. |        73413.        331.       222. |        73413.        0.0
------------------------------------------------------------------------------------------------------------
            |    461402800.     197942.      2331. |    722207400.     331386.      2179. |    260804500.       56.5
```

```
Results of Emission Projection for Region  18
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:53 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 2005                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1906      573    41135    20019    20592  52.2 |     3322      370    67864     2160     2530  96.4 |  -87.7
CHEM MFG    |     7839     4842   157562    69345    74187  55.1 |    13945    10891   391424     1731    12622  96.9 |  -83.0
SURF COATG  |     1776     1662    40529    18404    20066  52.6 |     3979     1715    93476     1193     2908  97.0 |  -85.5
FUEL COMB   |     1822      367     5630     5232     5599  24.9 |     3608     1037     7064     5663     6700  37.2 |   19.7
SOLV PURCH  |     3533     3533    46945    46945    50478   0.0 |     8177     8177   108657   108657   116835   0.0 |  131.5
MISC        |     2512     1057    19668     6969     8026  63.8 |     4970     1331    37843     8171     9502  77.8 |   18.4
------------------------------------------------------------------------------------------------------------------------------
            |    19388    12034   311469   166914   178948  45.9 |    38000    23521   706328   127574   151095  79.7 |  -15.6
```

```
Results of Cost Analysis for Region 18
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:53 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |           Proj Year = 2005          |
ID          |          Cost    Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |       Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |     45137620.      22449.      2011. |    179219200.      68656.      2610. |    134081600.      297.1
CHEM MFG    |      3465031.      91214.        38. |     63992110.     392747.       163. |     60527080.     1746.8
SURF COATG  |      3892722.      22239.       175. |     28428220.      94547.       301. |     24535500.      630.3
FUEL COMB   |            0.       1853.         0. |            0.       3971.         0. |            0.        0.0
SOLV PURCH  |            0.          0.         0. |            0.          0.         0. |            0.        0.0
MISC        |      3150084.      14154.       223. |      7766724.      33312.       233. |      4616640.      146.6
------------------------------------------------------------------------------------------------------------
            |     55645460.     151909.       366. |    279406300.     593233.       471. |    223760800.      402.1
```

```
Results of Emission Projection for Region  19
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:53 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                  |                  Proj Year = 2005                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0   700999   103958   103958  85.2 |        0        0  1311951     5288     5288  99.6 |  -94.9
CHEM MFG   |        0        0   955331   176474   176474  81.5 |        0        0  3228174     2207     2207  99.9 |  -98.7
SURF COATG |        0        0    12269    10850    10850  11.6 |        0        0    23263     1393     1393  94.0 |  -87.2
FUEL COMB  |        0        0    36288    31269    31269  13.8 |        0        0    43737    38021    38021  13.1 |   21.6
SOLV PURCH |        0        0    39957    39957    39957   0.0 |        0        0    82312    82312    82312   0.0 |  106.0
MISC       |        0        0    10728    10212    10212   4.8 |        0        0    20389     3587     3587  82.4 |  -64.9
-------------------------------------------------------------------------------------------------------------------------
           |        0        0  1755572   372720   372720  78.8 |        0        0  4709825   132807   132807  97.2 |  -64.4
```

```
Results of Cost Analysis for Region 19
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:53 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980           |           Proj Year = 2005           |
ID         |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |  1214326000.     597041.       2034. |  5239876000.    1306663.       4010. |  4025550000.       331.5
CHEM MFG   |    71472330.     778857.         92. |   290133500.    3225968.         90. |   218661200.       305.9
SURF COATG |      322113.       1419.        227. |     4964339.      21869.        227. |     4642226.      1441.2
FUEL COMB  |           0.       5019.          0. |           0.       5716.          0. |           0.         0.0
SOLV PURCH |           0.          0.          0. |           0.          0.          0. |           0.         0.0
MISC       |       95238.        516.        185. |     3695572.      16802.        220. |     3600334.      3780.4
--------------------------------------------------------------------------------------------------------------
           |  1286216000.    1382852.        930. |  5538670000.    4577018.       1210. |  4252454000.       330.6
```

```
Results of Emission Projection for Region  20
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:53 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                  |                  Proj Year = 2005                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     5828     5600     6133     6133    11733   1.9 |    11321     4028    11770      440     4468  80.7 |  -61.9
CHEM MFG   |        0        0     2702     2702     2702   0.0 |        0        0     7026        0        0 100.0 | -100.0
SURF COATG |      177      177     6900     3630     3807  46.2 |      337      174    13345      379      552  96.0 |  -85.5
FUEL COMB  |      573      573      667      667     1240   0.0 |     1110     1110     1340     1340     2450   0.0 |   97.6
SOLV PURCH |     7463     7463    13860    13860    21323   0.0 |    18334    18334    34050    34050    52384   0.0 |  145.7
MISC       |      648      648      194      191      839   0.4 |     1117     1117      488       18     1135  29.3 |   35.3
-------------------------------------------------------------------------------------------------------------------------
           |    14689    14461    30456    27183    41644   7.8 |    32220    24764    68019    36226    60990  39.2 |   46.5
```

```
Results of Cost Analysis for Region 20
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:53 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980           |           Proj Year = 2005           |
ID         |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |      531468.        228.       2331. |     3896274.      18623.        209. |     3364806.       633.1
CHEM MFG   |           0.          0.          0. |     1711994.       7026.        244. |     1711994.         0.0
SURF COATG |      742290.       3270.        227. |     3659248.      13130.        279. |     2916958.       393.0
FUEL COMB  |           0.          0.          0. |           0.          0.          0. |           0.         0.0
SOLV PURCH |           0.          0.          0. |           0.          0.          0. |           0.         0.0
MISC       |         258.          3.         86. |       98654.        469.        210. |       98396.     38138.0
--------------------------------------------------------------------------------------------------------------
           |     1274016.       3501.        364. |     9366169.      39248.        239. |     8092153.       635.2
```

```
Results of Emission Projection for Region  21
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:54 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                Proj Year = 2005                    |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   266372    32364        0        0    32364  87.9 |   464279    16932        0        0    16932  96.4 |  -47.7
CHEM MFG    |    69931     3582        0        0     3582  94.9 |   138731     6857        0        0     6857  95.1 |   91.4
SURF COATG  |    22226    19548       85       85    19633  12.0 |    36094    20693      133        8    20701  42.9 |    5.4
FUEL COMB   |     2559     2559       24       24     2583   0.0 |     3391     3391       31       31     3422   0.0 |   32.5
SOLV PURCH  |    64450    64450      641      641    65091   0.0 |   128878   128878     1282     1282   130160   0.0 |  100.0
MISC        |    64555    18928     1454      257    19185  70.9 |   106496    24528     1591       75    24603  77.2 |   28.2
------------------------------------------------------------------------------------------------------------------------
            |   490093   141431     2204     1007   142438  71.1 |   877868   201279     3037     1396   202675  77.0 |   42.3
```

```
Results of Cost Analysis for Region 21
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:54 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980           |         Proj Year = 2005             |
ID          |        Cost   Emis Red   Cost Eff  |         Cost   Emis Red   Cost Eff   |      Abs Chg   Prct Chg
----------------------------------------------------------------------------------------------------
PETROLEUM   |    5568460.   234008.        24.   |     9939371.   447347.        22.    |    4370911.       78.5
CHEM MFG    |  116262600.    66349.      1752.   |   241315200.   131873.      1830.    |  125052600.      107.6
SURF COATG  |    1356315.     2678.       506.   |    11692310.    15526.       753.    |   10335990.      762.1
FUEL COMB   |          0.        0.         0.   |           0.        0.         0.    |          0.        0.0
SOLV PURCH  |          0.        0.         0.   |           0.        0.         0.    |          0.        0.0
MISC        |    9935896.    46824.       212.   |    17996360.    83483.       216.    |    8060462.       81.1
----------------------------------------------------------------------------------------------------
            |  133123300.   349859.       381.   |   280943200.   678230.       414.    |  147819900.      111.0
```

```
Results of Emission Projection for Region  22
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:54 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                Proj Year = 2005                    |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    13399    10197    10197  23.9 |        0        0    21428      392      392  98.2 |  -96.2
CHEM MFG    |        0        0     8511     8498     8498   0.2 |        0        0    13234       75       75  99.4 |  -99.1
SURF COATG  |        0        0    43410    42534    42534   2.0 |        0        0    65378     5007     5007  92.3 |  -88.2
FUEL COMB   |        0        0    30471    30471    30471   0.0 |        0        0    49241    49241    49241   0.0 |   61.6
SOLV PURCH  |        0        0   160850   160850   160850   0.0 |        0        0   400847   400847   400847   0.0 |  149.2
MISC        |        0        0    14104    14078    14078   0.2 |        0        0    26707      745      745  97.2 |  -94.7
------------------------------------------------------------------------------------------------------------------------
            |        0        0   270745   266628   266628   1.5 |        0        0   576835   456306   456306  20.9 |   71.1
```

```
Results of Cost Analysis for Region 22
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:54 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980           |         Proj Year = 2005             |
ID          |        Cost   Emis Red   Cost Eff  |         Cost   Emis Red   Cost Eff   |      Abs Chg   Prct Chg
----------------------------------------------------------------------------------------------------
PETROLEUM   |    3317382.     3202.      1036.   |    14139400.    21036.       672.    |   10822020.      326.2
CHEM MFG    |       2886.       13.       222.   |    10429010.    13160.       792.    |   10426120.   361265.4
SURF COATG  |    -218889.      876.         0.   |    31983250.    60371.       530.    |   32202140.        0.0
FUEL COMB   |          0.        0.         0.   |           0.        0.         0.    |          0.        0.0
SOLV PURCH  |          0.        0.         0.   |           0.        0.         0.    |          0.        0.0
MISC        |       4446.       26.       171.   |     8995398.    25962.       346.    |    8990952.   202225.6
----------------------------------------------------------------------------------------------------
            |    3105825.     4117.       754.   |    65547060.   120529.       544.    |   62441230.     2010.5
```

```
Results of Emission Projection for Region  23
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:54 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                    Base Year = 1980                  |                    Proj Year = 2005                    |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  |   %Chg
---------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0   394595    34773    34773   91.2 |        0        0   577796     2470     2470   99.6 |  -92.9
CHEM MFG   |        0        0    34445    34384    34384    0.2 |        0        0    71176      300      300   99.6 |  -99.1
SURF COATG |        0        0   145042   135825   135825    6.4 |        0        0   273045    16326    16326   94.0 |  -88.0
FUEL COMB  |        0        0    13960    13960    13960    0.0 |        0        0    15824    15824    15824    0.0 |   13.4
SOLV PURCH |        0        0   261240   261240   261240    0.0 |        0        0   565998   565998   565998    0.0 |  116.7
MISC       |        0        0    36112    23412    23412   35.2 |        0        0    53646    19711    19711   63.3 |  -15.8
---------------------------------------------------------------------------------------------------------------------------------
           |        0        0   885394   503594   503594   43.1 |        0        0  1557486   620630   620630   60.2 |   23.2


Results of Cost Analysis for Region 23
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:54 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |          Proj Year = 2005            |
ID         |         Cost   Emis Red   Cost Eff |          Cost   Emis Red   Cost Eff |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |   838745100.    359822.      2331. |   2630994000.    575326.      4573. |  1792249000.       213.7
CHEM MFG   |       13542.        61.       222. |     14749000.     70876.       208. |    14735460.    108813.0
SURF COATG |     2075429.      9217.       225. |     81908920.    256719.       319. |    79833490.      3846.6
FUEL COMB  |          0.         0.         0. |            0.         0.         0. |           0.         0.0
SOLV PURCH |          0.         0.         0. |            0.         0.         0. |           0.         0.0
MISC       |     3394086.     12700.       267. |      9206156.     33935.       271. |     5812070.       171.2
---------------------------------------------------------------------------------------------------------------
           |   844228200.    381800.      2211. |   2736858000.    936856.      2921. |  1892630000.       224.2


Results of Emission Projection for Region  24
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:55 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                    Base Year = 1980                  |                    Proj Year = 2005                    |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC  |   %Chg
---------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    26778    24304        0        0    24304    9.2 |    35328    10451        0        0    10451   70.4 |  -57.0
CHEM MFG   |     2259     2236        0        0     2236    1.0 |     4846     4741        0        0     4741    2.2 |  112.0
SURF COATG |    36824    34337        0        0    34337    6.8 |    87342    69468        0        0    69468   20.5 |  102.3
FUEL COMB  |     5396     5396        0        0     5396    0.0 |     6180     6180        0        0     6180    0.0 |   14.5
SOLV PURCH |    92937    92937        0        0    92937    0.0 |   242128   242128        0        0   242128    0.0 |  160.5
MISC       |     1615     1599        0        0     1599    1.0 |     3070     3038        0        0     3038    1.1 |   90.0
---------------------------------------------------------------------------------------------------------------------------------
           |   165809   160809        0        0   160809    3.0 |   378894   336005        0        0   336005   11.3 |  108.9


Results of Cost Analysis for Region 24
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:55 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |          Proj Year = 2005            |
ID         |         Cost   Emis Red   Cost Eff |          Cost   Emis Red   Cost Eff |      Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM  |     2816847.      2474.      1139. |      4067738.     24878.       164. |     1250891.        44.4
CHEM MFG   |       2760.        23.       120. |        53001.       105.       506. |       50241.      1820.3
SURF COATG |     -535868.      2487.         0. |      5704392.     17874.       319. |     6240260.         0.0
FUEL COMB  |          0.         0.         0. |            0.         0.         0. |           0.         0.0
SOLV PURCH |          0.         0.         0. |            0.         0.         0. |           0.         0.0
MISC       |          0.        16.         0. |            0.        32.         0. |           0.         0.0
---------------------------------------------------------------------------------------------------------------
           |     2283739.      5000.       457. |      9825130.     42889.       229. |     7541391.       330.2
```

```
Results of Emission Projection for Region  25
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:55 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                Proj Year = 2005                   |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    21851    21851        0         0    21851   0.0 |    27047    18370        0         0    18370  32.1 |  -15.9
CHEM MFG    |   109914     2680        0         0     2680  97.6 |   232067     5108        0         0     5108  97.8 |   90.6
SURF COATG  |    10399    10399        0         0    10399   0.0 |    23418    22450        0         0    22450   4.1 |  115.9
FUEL COMB   |    37088    37088        0         0    37088   0.0 |    49530    49530        0         0    49530   0.0 |   33.5
SOLV PURCH  |    57933    57933        0         0    57933   0.0 |   138222   138222        0         0   138222   0.0 |  138.6
MISC        |     4085     4085        0         0     4085   0.0 |     8878     8878        0         0     8878   0.0 |  117.3
----------------------------------------------------------------------------------------------------------------------------
            |   241270   134036        0         0   134036  44.4 |   479162   242558        0         0   242558  49.4 |   81.0
```

```
Results of Cost Analysis for Region 25
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:55 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980            |           Proj Year = 2005           |
ID          |        Cost    Emis Red    Cost Eff |          Cost    Emis Red   Cost Eff |      Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |          0.          0.          0. |     -1498139.       8676.         0. |    -1498139.         0.0
CHEM MFG    |    -7291011.     107234.         0. |    -11128490.     226959.         0. |    -3837479.         0.0
SURF COATG  |          0.          0.          0. |      1055398.        968.      1090. |     1055398.         0.0
FUEL COMB   |          0.          0.          0. |            0.          0.         0. |           0.         0.0
SOLV PURCH  |          0.          0.          0. |            0.          0.         0. |           0.         0.0
MISC        |          0.          0.          0. |            0.          0.         0. |           0.         0.0
----------------------------------------------------------------------------------------------------------
            |    -7291011.     107234.         0. |    -11571230.     236604.         0. |    -4280220.         0.0
```

```
Results of Emission Projection for Region  26
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:55 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                Proj Year = 2005                   |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    56190     6224     7202      4618    10842  82.9 |    83414     5071     9513       328     5399  94.2 |  -50.2
CHEM MFG    |    53376    49170       21        21    49191   7.9 |   102100    94574       41         0    94574   7.4 |   92.3
SURF COATG  |   210081    55459    46672     46654   102113  60.2 |   367585   111539    83882       604   112143  75.2 |    9.8
FUEL COMB   |     2253     2163      441       441     2604   3.3 |     3737     3587      704       673     4260   4.1 |   63.6
SOLV PURCH  |    92524    92524    37792     37792   130316   0.0 |   205011   205011    83738     83738   288749   0.0 |  121.6
MISC        |    42599    11941       66        66    12007  71.9 |    72701    21617       91         8    21625  70.3 |   80.1
----------------------------------------------------------------------------------------------------------------------------
            |   457023   217481    92194     89592   307073  44.1 |   834546   441399   177968     85350   526749  48.0 |   71.5
```

```
Results of Cost Analysis for Region 26
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:55 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980            |           Proj Year = 2005           |
ID          |        Cost    Emis Red    Cost Eff |          Cost    Emis Red   Cost Eff |      Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |   105914600.     52550.       2016. |    162415700.      87528.      1856. |    56501140.        53.3
CHEM MFG    |      125146.      4206.         30. |       255507.       7567.        34. |      130361.       104.2
SURF COATG  |    34307510.    154640.        222. |     58635550.     339323.       173. |    24328040.        70.9
FUEL COMB   |           0.        90.          0. |            0.        180.         0. |           0.         0.0
SOLV PURCH  |           0.         0.          0. |            0.          0.         0. |           0.         0.0
MISC        |     6803634.     30658.        222. |     11350430.      51167.       222. |     4546793.        66.8
----------------------------------------------------------------------------------------------------------
            |   147150900.    242144.        608. |    232657200.     485765.       479. |    85506340.        58.1
```

```
Results of Emission Projection for Region  27
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:56 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                  Proj Year = 2005                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    36087     9381        0        0     9381  74.0 |    58765     8391        0        0     8391  85.7 |  -10.6
CHEM MFG    |      131      131        0        0      131   0.0 |      257      257        0        0      257   0.0 |   96.0
FUEL COMB   |     2632     2632        0        0     2632   0.0 |     3031     3031        0        0     3031   0.0 |   15.2
SOLV PURCH  |     5079     5079        0        0     5079   0.0 |    10988    10988        0        0    10988   0.0 |  116.3
MISC        |     1351     1333        0        0     1333   1.3 |     2089     2062        0        0     2062   1.3 |   54.7
--------------------------------------------------------------------------------------------------------------------------------
            |    45280    18556        0        0    18556  59.0 |    75129    24729        0        0    24729  67.1 |   33.3
```

```
Results of Cost Analysis for Region 27
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:56 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |          Proj Year = 2005             |
ID          |        Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |    Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |   61795050.      26706.       2314. |   107172900.      50374.       2128. |  45377810.        73.4
CHEM MFG    |          0.          0.          0. |           0.          0.          0. |         0.         0.0
FUEL COMB   |          0.          0.          0. |           0.          0.          0. |         0.         0.0
SOLV PURCH  |          0.          0.          0. |           0.          0.          0. |         0.         0.0
MISC        |       3996.         18.        222. |        5871.         26.        222. |      1875.        46.9
-----------------------------------------------------------------------------------------------------------
            |   61799040.      26724.       2312. |   107178700.      50401.       2127. |  45379680.        73.4
```

```
Results of Emission Projection for Region  28
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:56 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                  Proj Year = 2005                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      933      933     2387     2330     3263   1.7 |     1176      330     3836       54      385  92.3 |  -88.2
CHEM MFG    |      485      485        0        0      485   0.0 |      929      929        0        0      929   0.0 |   91.5
SURF COATG  |    31591    31561    20235     9792    41353  20.2 |    77212    67461    46880     1514    68974  44.4 |   66.8
FUEL COMB   |     2097     2097      481      481     2578   0.0 |     2510     2510      455      455     2966   0.0 |   15.0
SOLV PURCH  |    13924    13924     4892     4892    18816   0.0 |    30962    30962    10878    10878    41840   0.0 |  122.4
MISC        |       64       64       10       10       74   0.0 |       98       98       16       11      109   4.4 |   47.2
--------------------------------------------------------------------------------------------------------------------------------
            |    49094    49064    28005    17505    66569  13.7 |   112887   102290    62066    12913   115203  34.2 |   73.1
```

```
Results of Cost Analysis for Region 28
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:56 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |          Proj Year = 2005             |
ID          |        Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |    Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |     132867.         57.       2331. |      232638.       4628.         50. |     99771.        75.1
CHEM MFG    |          0.          0.          0. |           0.          0.          0. |         0.         0.0
SURF COATG  |    1725951.      10473.        165. |    11239560.      55117.        204. |   9513609.       551.2
FUEL COMB   |          0.          0.          0. |           0.          0.          0. |         0.         0.0
SOLV PURCH  |          0.          0.          0. |           0.          0.          0. |         0.         0.0
MISC        |          0.          0.          0. |        1111.          5.        222. |      1111.         0.0
-----------------------------------------------------------------------------------------------------------
            |    1858818.      10530.        177. |    11473310.      59750.        192. |   9614491.       517.2
```

```
Results of Emission Projection for Region  29
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:56 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                 Proj Year = 2005                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      527      527     3980     1686     2213  50.9 |     1094      470    10122       51      521  95.4 |   -76.4
SURF COATG |     1181     1181        0        0     1181   0.0 |     4114     4114        0        0     4114   0.0 |   248.3
FUEL COMB  |       48       48      181      181      229   0.0 |      106      106      375      375      481   0.0 |   110.0
SOLV PURCH |     1450     1450     1445     1445     2895   0.0 |     4318     4318     4303     4303     8620   0.0 |   197.8
MISC       |        0        0        1        1        1   0.0 |        0        0        2        0        0  92.1 |   -86.4
-----------------------------------------------------------------------------------------------------------------------------
           |     3206     3206     5607     3313     6519  26.0 |     9631     9008    14801     4728    13736  43.8 |   110.7
```

```
Results of Cost Analysis for Region 29
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:56 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980         |           Proj Year = 2005         |
ID         |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM  |     1329053.      2294.       579. |     5327238.     10694.       498. |     3998185.       300.8
SURF COATG |          0.          0.         0. |          0.          0.         0. |          0.          0.0
FUEL COMB  |          0.          0.         0. |          0.          0.         0. |          0.          0.0
SOLV PURCH |          0.          0.         0. |          0.          0.         0. |          0.          0.0
MISC       |          0.          0.         0. |        351.          2.       222. |        351.          0.0
-----------------------------------------------------------------------------------------------------------
           |     1329053.      2294.       579. |     5327590.     10696.       498. |     3998537.       300.9
```

```
Results of Emission Projection for Region  30
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:56 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                 Proj Year = 2005                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0    59410     3846     3846  93.5 |        0        0   140584        8        8 100.0 |   -99.8
CHEM MFG   |        0        0      526      526      526   0.0 |        0        0     1355        0        0 100.0 |  -100.0
SURF COATG |        0        0    21951    14618    14618  33.4 |        0        0    62398     1326     1326  97.9 |   -90.9
FUEL COMB  |        0        0      241      241      241   0.0 |        0        0      599      599      599   0.0 |   148.5
SOLV PURCH |        0        0    27436    27436    27436   0.0 |        0        0    88504    88504    88504   0.0 |   222.6
MISC       |        0        0      632      632      632   0.0 |        0        0     1596     1004     1004  37.1 |    58.9
-----------------------------------------------------------------------------------------------------------------------------
           |        0        0   110196    47299    47299  57.1 |        0        0   295036    91441    91441  69.0 |    93.3
```

```
Results of Cost Analysis for Region 30
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:56 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980         |           Proj Year = 2005         |
ID         |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM  |   122062900.     55564.      2197. |   617378500.    140576.      4392. |   495315600.       405.8
CHEM MFG   |          0.          0.         0. |      300903.      1355.       222. |      300903.         0.0
SURF COATG |     3768585.      7333.       514. |    26010910.     61072.       426. |    22242330.       590.2
FUEL COMB  |          0.          0.         0. |          0.          0.         0. |          0.          0.0
SOLV PURCH |          0.          0.         0. |          0.          0.         0. |          0.          0.0
MISC       |          0.          0.         0. |      164632.       592.       278. |      164632.         0.0
-----------------------------------------------------------------------------------------------------------
           |   125831500.     62897.      2001. |   643855000.    203595.      3162. |   518023500.       411.7
```

```
Results of Emission Projection for Region  31
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:57 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                  |                   Proj Year = 2005                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |    %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   408286    48137    48137   88.2 |        0        0   565412     3921     3921   99.3 |   -91.9
CHEM MFG    |        0        0   147127    21362    21362   85.5 |        0        0   319974        0        0  100.0 |  -100.0
SURF COATG  |        0        0    16779     9921     9921   40.9 |        0        0    33767      900      900   97.3 |   -90.9
FUEL COMB   |        0        0     8262     8160     8160    1.2 |        0        0    15625    15519    15519    0.7 |    90.2
SOLV PURCH  |        0        0   200270   200270   200270    0.0 |        0        0   444224   444224   444224    0.0 |   121.8
MISC        |        0        0   250278    67189    67189   73.2 |        0        0   399970     1050     1050   99.7 |   -98.4
------------------------------------------------------------------------------------------------------------------------------
            |        0        0  1031002   355039   355039   65.6 |        0        0  1778973   465614   465614   73.8 |    31.1
```

```
Results of Cost Analysis for Region 31
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:57 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 2005           |
ID          |        Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |     Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |  456773800.    360149.      1268. |  1399408000.    561492.      2492. |  942634600.      206.4
CHEM MFG    |    1302154.    125765.        10. |    14794320.    319974.        46. |   13492170.     1036.1
SURF COATG  |    1572060.      6858.       229. |     7186581.     32867.       219. |    5614521.      357.1
FUEL COMB   |          0.       102.         0. |           0.       106.         0. |          0.        0.0
SOLV PURCH  |          0.         0.         0. |           0.         0.         0. |          0.        0.0
MISC        |   82684060.    183089.       452. |   171686000.    398920.       430. |   89001960.      107.6
--------------------------------------------------------------------------------------------------------------
            |  542332000.    675963.       802. |  1593075000.   1313359.      1213. | 1050743000.      193.7
```

```
Results of Emission Projection for Region  32
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:57 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                  |                   Proj Year = 2005                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |    %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     9147     5195    23790    23790    28985   12.0 |    14625     2476    55301      425     2900   95.9 |   -90.0
SURF COATG  |      350        7        0        0        7   98.0 |      800       16        0        0       16   98.0 |   128.5
FUEL COMB   |    22641    22641       47       47    22688    0.0 |    29012    29012      110      110    29123    0.0 |    28.4
SOLV PURCH  |     4603     4603     3921     3921     8524    0.0 |    13571    13571    11560    11560    25130    0.0 |   194.8
MISC        |      677      677        5        5      682    0.0 |     1566     1566       10        1     1567    0.6 |   129.7
------------------------------------------------------------------------------------------------------------------------------
            |    37418    33123    27763    27763    60886    6.6 |    59574    46641    66981    12095    58736   53.6 |    -3.5
```

```
Results of Cost Analysis for Region 32
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:57 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 2005           |
ID          |        Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |     Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |    9212112.      3952.      2331. |    12978280.     67026.       194. |    3766167.       40.9
SURF COATG  |    1346961.       343.      3927. |     3077461.       784.      3927. |    1730500.      128.5
FUEL COMB   |          0.         0.         0. |           0.         0.         0. |          0.        0.0
SOLV PURCH  |          0.         0.         0. |           0.         0.         0. |          0.        0.0
MISC        |          0.         0.         0. |         274.         9.        31. |        274.        0.0
--------------------------------------------------------------------------------------------------------------
            |   10559070.      4295.      2458. |    16056010.     67819.       237. |    5496941.       52.1
```

```
Results of Emission Projection for Region  33
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:57 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                 |                 Proj Year = 2005                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1391     1279    24591    24591    25870   0.4 |     1654     1128    24227     5037     6165  76.2 |   -76.2
CHEM MFG    |      517      517     1151     1151     1668   0.0 |     1489      493     2555        0      493  87.8 |   -70.4
SURF COATG  |    15328    15328    26867    26867    42195   0.0 |    28631    27933    50174     3519    31452  60.1 |   -25.5
FUEL COMB   |     2564     2564     4055     4055     6619   0.0 |     4181     4181     6891     6891    11072   0.0 |    67.3
SOLV PURCH  |   126654   126654   225162   225162   351816   0.0 |   268363   268363   477088   477088   745451   0.0 |   111.9
MISC        |    32254    32254    35868    35404    67658   0.7 |    48990    48565    59124    29757    78322  27.6 |    15.8
-------------------------------------------------------------------------------------------------------------------------------
            |   178708   178596   317694   317230   495826   0.1 |   353308   350664   620060   522291   872955  10.3 |    76.1
```

```
Results of Cost Analysis for Region 33
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:57 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 2005             |
ID          |          Cost    Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |        Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |        -2688.       112.         0. |     32349450.     19716.      1641. |     32352140.         0.0
CHEM MFG    |            0.         0.         0. |      1271931.      3551.       358. |      1271931.         0.0
SURF COATG  |            0.         0.         0. |     10358010.     47354.       219. |     10358010.         0.0
FUEL COMB   |            0.         0.         0. |            0.         0.         0. |            0.         0.0
SOLV PURCH  |            0.         0.         0. |            0.         0.         0. |            0.         0.0
MISC        |       225504.       464.       486. |     14430060.     29792.       484. |     14204550.      6299.0
---------------------------------------------------------------------------------------------------------------
            |       222816.       576.       387. |     58409450.    100413.       582. |     58186640.     26114.2
```

```
Results of Emission Projection for Region  34
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:58 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                 |                 Proj Year = 2005                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    36054     7996     5480     2098    10094  75.7 |    67578     8917    11814       70     8987  88.7 |   -11.0
CHEM MFG    |  1091207    39849     2283     2283    42132  96.1 |  2484760    93681     5317        0    93681  96.2 |   122.4
SURF COATG  |    40170    38793      819      819    39612   3.4 |   113256    67643     1964       66    67709  41.2 |    70.9
FUEL COMB   |     8050     8050      247      247     8297   0.0 |    13566    13566      319      319    13885   0.0 |    67.3
SOLV PURCH  |   128112   128112     6743     6743   134855   0.0 |   299112   299112    15743    15743   314855   0.0 |   133.5
MISC        |    59673    12454        0        0    12454  79.1 |   102199    18704        0        0    18704  81.7 |    50.2
-------------------------------------------------------------------------------------------------------------------------------
            |  1363266   235254    15572    12190   247444  82.1 |  3080470   501623    35158    16198   517821  83.4 |   109.3
```

```
Results of Cost Analysis for Region 34
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:58 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 2005             |
ID          |          Cost    Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |        Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |     30330310.     31440.       965. |    118920800.     70406.      1689. |     88590440.       292.1
CHEM MFG    |    -11556510.   1051358.         0. |    -22582520.   2396396.         0. |    -11026010.         0.0
SURF COATG  |       312579.      1377.       227. |      7368734.     47511.       155. |      7056155.      2257.4
FUEL COMB   |            0.         0.         0. |            0.         0.         0. |            0.         0.0
SOLV PURCH  |            0.         0.         0. |            0.         0.         0. |            0.         0.0
MISC        |     21567230.     47219.       457. |     38683800.     83495.       463. |     17116570.        79.4
---------------------------------------------------------------------------------------------------------------
            |     40653620.   1131394.        36. |    142390800.   2597808.        55. |    101737200.       250.3
```

```
Results of Emission Projection for Region  35
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:58 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                    Proj Year = 2005                   |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1340     1340        0         0     1340   0.0 |     1312      879        0         0      879  33.0 |   -34.4
FUEL COMB   |      601      601        0         0      601   0.0 |      994      994        0         0      994   0.0 |    65.4
SOLV PURCH  |     4186     4186        0         0     4186   0.0 |    10075    10075        0         0    10075   0.0 |   140.7
------------------------------------------------------------------------------------------------------------------------------
            |     6127     6127        0         0     6127   0.0 |    12380    11948        0         0    11948   3.5 |    95.0
```

```
Results of Cost Analysis for Region 35
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:58 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |           Proj Year = 2005            |
ID          |        Cost      Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |       Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------------
PETROLEUM   |          0.           0.         0. |        11433.        432.        26. |        11433.         0.0
FUEL COMB   |          0.           0.         0. |            0.          0.         0. |            0.         0.0
SOLV PURCH  |          0.           0.         0. |            0.          0.         0. |            0.         0.0
-------------------------------------------------------------------------------------------------------------------
            |          0.           0.         0. |        11433.        432.        26. |        11433.         0.0
```

```
Results of Emission Projection for Region  36
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:58 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                    Proj Year = 2005                   |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    93995     20404    20404  78.3 |        0        0   109439      2470     2470  97.7 |   -87.9
CHEM MFG    |        0        0    91620     23471    23471  74.4 |        0        0   173894       604      604  99.7 |   -97.4
SURF COATG  |        0        0   175053     93074    93074  46.8 |        0        0   325299      6995     6995  97.8 |   -92.5
FUEL COMB   |        0        0    25278     25278    25278   0.0 |        0        0    27115     27115    27115   0.0 |     7.3
SOLV PURCH  |        0        0   334152    334152   334152   0.0 |        0        0   690132    690132   690132   0.0 |   106.5
MISC        |        0        0    49990     21382    21382  57.2 |        0        0    68349      8297     8297  87.9 |   -61.2
------------------------------------------------------------------------------------------------------------------------------
            |        0        0   770088    517761   517761  32.8 |        0        0  1394228    735614   735614  47.2 |    42.1
```

```
Results of Cost Analysis for Region 36
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:58 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |           Proj Year = 2005            |
ID          |        Cost      Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |       Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   24973600.      73591.       339. |     85550760.     106968.       800. |     60577160.       242.6
CHEM MFG    |    3310755.      68149.        49. |      9952786.     173290.        57, |      6642031.       200.6
SURF COATG  |   15385890.      81979.       188. |     75069540.     318304.       236. |     59683640.       387.9
FUEL COMB   |          0.          0.         0. |            0.          0.         0. |            0.         0.0
SOLV PURCH  |          0.          0.         0. |            0.          0.         0. |            0.         0.0
MISC        |    6288756.      28608.       220. |     12660130.      60052.       211. |      6371378.       101.3
-------------------------------------------------------------------------------------------------------------------
            |   49959010.     252327.       198. |    183233200.     658614.       278. |    133274200.       266.8
```

```
Results of Emission Projection for Region  37
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:59 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                  |                 Proj Year = 2005                    |
ID          |  Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     58888    48710    650426      5503    54213  92.4 |     73101    24723   731706      430    25153  96.9 |  -53.6
CHEM MFG    |      6106     4648      1619      1619     6267  18.9 |     11902     9186     3132        0     9186  38.9 |   46.6
SURF COATG  |    663776     1430      9173      4189     5619  99.2 |   1499240    11866    20565       47    11913  99.2 |  112.0
FUEL COMB   |     35147    35147      9836      9836    44983   0.0 |     39730    39730    11961    11961    51691   0.0 |   14.9
SOLV PURCH  |     34992    34992      8288      8288    43280   0.0 |     99527    99527    23573    23573   123101   0.0 |  184.4
MISC        |      2178     2178      1994       905     3083  26.1 |      3740     3740     3760       98     3838  48.8 |   24.5
-------------------------------------------------------------------------------------------------------------------------------
            |    801087   127105    681336     30340   157445  89.4 |   1727241   188773   794698    36109   224882  91.1 |   42.8


Results of Cost Analysis for Region 37
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:59 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |          Proj Year = 2005           |
ID          |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |    56565800.    655101.        86. |   162982900.    779654.       209. |   106417100.      188.1
CHEM MFG    |     1331154.      1458.       913. |     4695563.      5847.       803. |     3364409.      252.7
SURF COATG  |   118799200.    667330.       178. |   280690000.   1507893.       186. |   161890800.      136.3
FUEL COMB   |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH  |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC        |      241758.      1089.       222. |      580189.      3662.       158. |      338431.      140.0
----------------------------------------------------------------------------------------------------------
            |   176937900.   1324978.       134. |   448948700.   2297056.       195. |   272010800.      153.7


Results of Emission Projection for Region  38
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:59 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                   Base Year = 1980                  |                 Proj Year = 2005                    |
ID          |  Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    122071     6323       400        20     6343  94.8 |    243515    12236      798        0    12236  95.0 |   92.9
CHEM MFG    |     13331    13331      1112      1112    14443   0.0 |     27657    27657     1316        0    27657   4.5 |   91.5
SURF COATG  |      3434     3434      4735      4735     8169   0.0 |      7586     6056    12615        0     6056  70.0 |  -25.9
FUEL COMB   |      7051     7051      2271      2271     9322   0.0 |     10596    10596     3537     3537    14132   0.0 |   51.6
SOLV PURCH  |     34141    34141      8537      8537    42678   0.0 |     79293    79293    19827    19827    99120   0.0 |  132.3
MISC        |      3658     3658       536       536     4194   0.0 |      6421     6421      805      194     6615   8.4 |   57.7
-------------------------------------------------------------------------------------------------------------------------------
            |    183686    67938     17591     17211    85149  57.7 |    375068   142258    38898    23558   165817  59.9 |   94.7


Results of Cost Analysis for Region 38
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:59 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |          Proj Year = 2005           |
ID          |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |   270694400.    116128.      2331. |   540440400.    232077.      2329. |   269746000.       99.6
CHEM MFG    |           0.         0.         0. |      -18417.      1316.         0. |      -18417.        0.0
SURF COATG  |           0.         0.         0. |     2354150.     14145.       166. |     2354150.        0.0
FUEL COMB   |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH  |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC        |           0.         0.         0. |      135504.       610.       222. |      135504.        0.0
----------------------------------------------------------------------------------------------------------
            |   270694400.    116128.      2331. |   542911600.    248149.      2188. |   272217200.      100.6
```

```
Results of Emission Projection for Region  39
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:00 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                      |                 Proj Year = 2005                       |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn    Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   231232    49846    49846  78.4 |         0         0    294069     5157     5157  98.2 |   -89.7
CHEM MFG    |        0        0    99770    16879    16879  83.1 |         0         0    188789      176      176  99.9 |   -99.0
SURF COATG  |        0        0   223368   126026   126026  43.6 |         0         0    395960    11596    11596  97.1 |   -90.8
FUEL COMB   |        0        0    14866    14746    14746   0.8 |         0         0     14033    13836    13836   1.4 |    -6.2
SOLV PURCH  |        0        0   295168   295168   295168   0.0 |         0         0    574300   574300   574300   0.0 |    94.6
MISC        |        0        0    61365    43464    43464  29.2 |         0         0    101528    16617    16617  83.6 |   -61.8
-------------------------------------------------------------------------------------------------------------------------------
            |        0        0   925769   546129   546129  41.0 |         0         0   1568680   621682   621682  60.4 |    13.8
```

```
Results of Cost Analysis for Region 39
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:00 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |           Proj Year = 2005             |
ID          |         Cost     Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |   279040000.     181386.       1538. |    754382500.    288912.       2611. |   475342500.       170.3
CHEM MFG    |      190628.      82891.          2. |     33635900.    188613.        178. |    33445270.     17544.8
SURF COATG  |    26654080.      97342.        274. |    117514100.    384364.        306. |    90860000.       340.9
FUEL COMB   |           0.        120.          0. |            0.       198.          0. |           0.         0.0
SOLV PURCH  |           0.          0.          0. |            0.         0.          0. |           0.         0.0
MISC        |     3843936.      17901.        215. |     18578240.     84911.        219. |    14734300.       383.3
----------------------------------------------------------------------------------------------------------
            |   309728600.     379640.        816. |    924110700.    946998.        976. |   614382000.       198.4
```

```
Results of Emission Projection for Region  41
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:00 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                      |                 Proj Year = 2005                       |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn    Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0     3265     3037     3037   7.0 |         0         0      5869      235      235  96.0 |   -92.3
CHEM MFG    |        0        0     8059      497      497  93.8 |         0         0      8358        0        0 100.0 |  -100.0
SURF COATG  |        0        0    11578     8978     8978  22.5 |         0         0     17584      983      983  94.4 |   -89.1
FUEL COMB   |        0        0      149      149      149   0.0 |         0         0       229      229      229   0.0 |    53.5
SOLV PURCH  |        0        0    37388    37388    37388   0.0 |         0         0     75251    75251    75251   0.0 |   101.3
MISC        |        0        0      597      119      119  80.1 |         0         0       808       12       12  98.5 |   -90.0
-------------------------------------------------------------------------------------------------------------------------------
            |        0        0    61036    50168    50168  17.8 |         0         0    108098    76709    76709  29.0 |    52.9
```

```
Results of Cost Analysis for Region 41
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:00 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980            |           Proj Year = 2005             |
ID          |         Cost     Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |      531468.        228.       2331. |      3665045.      5634.        651. |     3133577.       589.6
CHEM MFG    |     -113430.       7562.          0. |       -85297.      8358.          0. |       28133.         0.0
SURF COATG  |      512732.       2600.        197. |      6320255.     16601.        381. |     5807523.      1132.7
FUEL COMB   |           0.          0.          0. |            0.         0.          0. |           0.         0.0
SOLV PURCH  |           0.          0.          0. |            0.         0.          0. |           0.         0.0
MISC        |       41108.        478.         86. |        92414.       796.        116. |       51306.       124.8
----------------------------------------------------------------------------------------------------------
            |      971878.      10868.         89. |      9992416.     31389.        318. |     9020538.       928.2
```

```
Results of Emission Projection for Region  42
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:00 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                  |                   Proj Year = 2005                  |
ID         |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |         0        0    58275     8087     8087  86.1 |         0        0    96960      561      561  99.4 |  -93.1
CHEM MFG   |         0        0    95982    33475    33475  65.1 |         0        0   218713      855      855  99.6 |  -97.4
SURF COATG |         0        0   196094   160290   160290  18.3 |         0        0   471594    14429    14429  96.9 |  -91.0
FUEL COMB  |         0        0     4684     4684     4684   0.0 |         0        0     7102     7102     7102   0.0 |   51.6
SOLV PURCH |         0        0    70020    70020    70020   0.0 |         0        0   157234   157234   157234   0.0 |  124.6
MISC       |         0        0    27592    20581    20581  25.4 |         0        0    44764     4521     4521  89.9 |  -78.0
-------------------------------------------------------------------------------------------------------------------------------
           |         0        0   452647   297137   297137  34.4 |         0        0   996367   184702   184702  81.5 |  -37.8
```

```
Results of Cost Analysis for Region 42
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:00 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980           |           Proj Year = 2005           |
ID         |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    21976620.      50188.        438. |    51406540.      96398.        533. |    29429910.       133.9
CHEM MFG   |    -1789561.      62507.          0. |      835746.     217858.          4. |     2625307.         0.0
SURF COATG |    11232350.      35804.        314. |   163231900.     457165.        357. |   151999500.      1353.2
FUEL COMB  |           0.          0.          0. |           0.          0.          0. |           0.         0.0
SOLV PURCH |           0.          0.          0. |           0.          0.          0. |           0.         0.0
MISC       |      602946.       7011.         86. |     3835652.      40244.         98. |     3332706.       552.7
-------------------------------------------------------------------------------------------------------------------
           |    32022360.     155510.        206. |   219409800.     811665.        270. |   187387400.       585.2
```

```
Results of Emission Projection for Region  43
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:00 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                  |                   Proj Year = 2005                  |
ID         |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      1672     1672        0        0     1672   0.0 |      2508      619        0        0      619  75.3 |  -63.0
FUEL COMB  |       194      194        0        0      194   0.0 |       332      332        0        0      332   0.0 |   71.2
SOLV PURCH |      6538     6538        0        0     6538   0.0 |     16610    16610        0        0    16610   0.0 |  154.1
MISC       |      1162     1162        0        0     1162   0.0 |      1837     1837        0        0     1837   0.0 |   58.1
-------------------------------------------------------------------------------------------------------------------------------
           |      9566     9566        0        0     9566   0.0 |     21287    19398        0        0    19398   8.9 |  102.8
```

```
Results of Cost Analysis for Region 43
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:00 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980           |           Proj Year = 2005           |
ID         |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------------
PETROLEUM  |           0.          0.          0. |     -294568.       1889.          0. |     -294568.         0.0
FUEL COMB  |           0.          0.          0. |           0.          0.          0. |           0.         0.0
SOLV PURCH |           0.          0.          0. |           0.          0.          0. |           0.         0.0
MISC       |           0.          0.          0. |           0.          0.          0. |           0.         0.0
-------------------------------------------------------------------------------------------------------------------
           |           0.          0.          0. |     -294568.       1889.          0. |     -294568.         0.0
```

```
Results of Emission Projection for Region  44
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:01 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 2005                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    18214     8070     8070  55.7 |        0        0    32738      696      696  97.9 |  -91.4
CHEM MFG    |        0        0   864272    60147    60147  93.0 |        0        0  1711550     2807     2807  99.8 |  -95.3
SURF COATG  |        0        0   100250    60459    60459  39.7 |        0        0   215583     5826     5826  97.3 |  -90.4
FUEL COMB   |        0        0    17364    17364    17364   0.0 |        0        0    28491    28491    28491   0.0 |   64.1
SOLV PURCH  |        0        0    87525    87525    87525   0.0 |        0        0   199955   199955   199955   0.0 |  128.5
MISC        |        0        0    85849    11801    11801  86.3 |        0        0   172390     4133     4133  97.6 |  -65.0
------------------------------------------------------------------------------------------------------------------------------
            |        0        0  1173474   245366   245366  79.1 |        0        0  2360707   241910   241910  89.8 |   -1.4
```

```
Results of Cost Analysis for Region 44
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:01 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 2005          |
ID          |         Cost    Emis Red  Cost Eff |         Cost    Emis Red  Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |    23363040.      10144.     2303. |    91784500.      32042.     2865. |    68421460.      292.9
CHEM MFG    |    17911160.     804125.       22. |    41847020.    1708743.       24. |    23935860.      133.6
SURF COATG  |    22261760.      39791.      559. |    96987690.     209756.      462. |    74725930.      335.7
FUEL COMB   |           0.          0.        0. |           0.          0.        0. |           0.        0.0
SOLV PURCH  |           0.          0.        0. |           0.          0.        0. |           0.        0.0
MISC        |     6529968.      74048.       88. |    17142210.     168257.      102. |    10612240.      162.5
---------------------------------------------------------------------------------------------------------------
            |    70065930.     928108.       75. |   247761400.    2118798.      117. |   177695500.      253.6
```

```
Results of Emission Projection for Region  45
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:01 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 2005                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   938580   150438  1948311   151939   310377  89.2 |  1211650    93264  2518728    10069   103333  97.2 |  -66.7
CHEM MFG    |  6636224   216664  2744492   119028   335692  96.4 | 15360412   492646  6492921        2   492648  97.7 |   46.8
SURF COATG  |    87575    85202    30085    29745   114947   2.3 |   198151   190679    67956     3402   194081  27.1 |   68.8
FUEL COMB   |   360485   320582   153735   153636   474218   7.8 |   392204   322939   150792   141922   464862  14.4 |   -2.0
SOLV PURCH  |   146774   146774    75611    75611   222385   0.0 |   349813   349813   180207   180207   530020   0.0 |  138.3
MISC        |   126954   120659    10659     7652   128311   6.8 |   298253   281629    22469     4322   285951  10.8 |  122.9
------------------------------------------------------------------------------------------------------------------------------
            |  8296592  1048319  4962893   537611  1585930  88.0 | 17810482  1730971  9433073   339923  2070894  92.4 |   30.6
```

```
Results of Cost Analysis for Region 45
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:01 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 2005          |
ID          |         Cost    Emis Red  Cost Eff |         Cost    Emis Red  Cost Eff |      Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |   922628700.    2576514.      358. |  2983335000.    3627045.      823. |  2060706000.      223.4
CHEM MFG    |  4227248000.    9045024.      467. |  9706486000.   21360680.      454. |  5479238000.      129.6
SURF COATG  |     2824090.       2713.     1041. |    26278660.      72025.      365. |    23454570.      830.5
FUEL COMB   |           0.      40002.        0. |           0.      78134.        0. |           0.        0.0
SOLV PURCH  |           0.          0.        0. |           0.          0.        0. |           0.        0.0
MISC        |     2387352.       9302.      257. |    10567570.      34771.      304. |     8180217.      342.6
---------------------------------------------------------------------------------------------------------------
            |  5155080000.   11673560.      442. | 12726670000.   25172660.      506. |  7571579000.      146.9
```

```
Results of Emission Projection for Region  46
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:02 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                   |                  Proj Year = 2005                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |    %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    13374     9026        6        6     9032   32.5 |    17282     4894        7        1     4896   71.7 |   -45.8
CHEM MFG   |      246      246        0        0      246    0.0 |      526      526        0        0      526    0.0 |   113.8
SURF COATG |      170      170        0        0      170    0.0 |      488      488        0        0      488    0.0 |   187.2
FUEL COMB  |     6146     6146      818      323     6469    7.1 |     7569     7406     1668      748     8153   11.7 |    26.0
SOLV PURCH |    17210    17210      351      351    17561    0.0 |    51044    51044     1041     1041    52085    0.0 |   196.6
MISC       |      370      370        2        2      372    0.0 |      850      850        4        0      850    0.4 |   128.6
--------------------------------------------------------------------------------------------------------------------------------
           |    37516    33168     1177      682    33850   12.5 |    77760    65209     2720     1790    66999   16.8 |    97.9
```

```
Results of Cost Analysis for Region 46
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:02 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------
Ind Cat    |         Base Year = 1980             |         Proj Year = 2005             |
ID         |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |        Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     9214092.       4348.       2119. |    14559210.      12394.       1175. |       5345121.        58.0
CHEM MFG   |           0.          0.          0. |           0.          0.          0. |             0.         0.0
SURF COATG |           0.          0.          0. |           0.          0.          0. |             0.         0.0
FUEL COMB  |           0.        495.          0. |           0.       1084.          0. |             0.         0.0
SOLV PURCH |           0.          0.          0. |           0.          0.          0. |             0.         0.0
MISC       |           0.          0.          0. |         747.          3.        222. |           747.         0.0
------------------------------------------------------------------------------------------------------------------
           |     9214092.       4843.       1903. |    14559960.      13481.       1080. |       5345868.        58.0
```

```
Results of Emission Projection for Region  47
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:02 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                   |                  Proj Year = 2005                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |    %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0      536      384      384   28.4 |        0        0     1048        8        8   99.3 |   -98.0
CHEM MFG   |        3        3       15       15       18    0.0 |        7        7       46        2        8   84.5 |   -54.8
SURF COATG |     1697     1663     1154     1069     2732    4.2 |     3058     2781     2089      147     2928   43.1 |     7.2
FUEL COMB  |       61       61       67       67      128    0.0 |      121      121      124      124      245    0.0 |    91.5
SOLV PURCH |     4094     4094     4094     4094     8188    0.0 |    12589    12589    12589    12589    25178    0.0 |   207.5
MISC       |      324      324      398      398      722    0.0 |      523      523      713      713     1236    0.0 |    71.2
--------------------------------------------------------------------------------------------------------------------------------
           |     6179     6145     6264     6027    12172    2.2 |    16298    16021    16608    13582    29603   10.0 |   143.2
```

```
Results of Cost Analysis for Region 47
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:02 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------
Ind Cat    |         Base Year = 1980             |         Proj Year = 2005             |
ID         |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |        Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      354312.        152.       2331. |     1611722.       1040.       1550. |       1257410.       354.9
CHEM MFG   |           0.          0.          0. |         356.         45.          8. |           356.         0.0
SURF COATG |      129710.        119.       1090. |     1002474.       2219.        452. |        872764.       672.9
FUEL COMB  |           0.          0.          0. |           0.          0.          0. |             0.         0.0
SOLV PURCH |           0.          0.          0. |           0.          0.          0. |             0.         0.0
MISC       |           0.          0.          0. |           0.          0.          0. |             0.         0.0
------------------------------------------------------------------------------------------------------------------
           |      484022.        271.       1786. |     2614552.       3303.        791. |       2130530.       440.2
```

```
Results of Emission Projection for Region  48
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:02 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                     Base Year = 1980                     |                    Proj Year = 2005                    |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr    LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr    LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   115631     8798      5704      1960     10758   91.1 |   142736     7038     12077       152      7190   95.4 |  -33.2
CHEM MFG    |   426513    29475      1973      1973     31448   92.7 |   600759    50219      4415         2     50221   91.7 |   59.7
SURF COATG  |    39019    32945      3054      3054     35999   14.4 |    88431    60387      6950       278     60665   36.4 |   68.5
FUEL COMB   |     4710     4710       511       511      5221    0.0 |     5989     5989       623       623      6611    0.0 |   26.6
SOLV PURCH  |    72563    72563      8063      8063     80626    0.0 |   166676   166676     18521     18521    185196    0.0 |  129.7
MISC        |    20920    18953      2977      2977     21930    8.2 |    43030    38042      5792        40     38082   22.0 |   73.7
--------------------------------------------------------------------------------------------------------------------------------
            |   679356   167444     22282     18538    185982   73.5 |  1047620   328350     48377     19616    347966   68.3 |   87.1
```

```
Results of Cost Analysis for Region 48
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:02 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |          Proj Year = 2005            |
ID          |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg     Prct Chg
------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   17607490.    110577.        159. |   74056420.    147622.        502. |   56448930.        320.6
CHEM MFG    |   -5517937.    397038.          0. |   -5715569.    554953.          0. |    -197632.          0.0
SURF COATG  |    1217473.      6074.        200. |    8950712.     34716.        258. |    7733239.        635.2
FUEL COMB   |          0.         0.          0. |          0.         0.          0. |          0.          0.0
SOLV PURCH  |          0.         0.          0. |          0.         0.          0. |          0.          0.0
MISC        |     434838.      1967.        221. |    3772675.     10740.        351. |    3337837.        767.6
------------------------------------------------------------------------------------------------------------------
            |   13741870.    515656.         27. |   81064240.    748031.        108. |   67322380.        489.9
```

```
Results of Emission Projection for Region  49
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:03 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                     Base Year = 1980                     |                    Proj Year = 2005                    |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr    LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr    LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   141490    11641      8954      8596     20237   86.5 |   263635     9879     15495      1273     11152   96.0 |  -44.9
CHEM MFG    |    98597      509       398       349       858   99.1 |   309884     1608      1006        30      1638   99.5 |   90.9
SURF COATG  |      642      642      3349      3327      3969    0.6 |     1246     1162      6516       306      1469   81.1 |  -63.0
FUEL COMB   |     4983     4983      5221      4495      9478    7.1 |     7891     7291      8682      7935     15226    8.1 |   60.6
SOLV PURCH  |    30571    30571     23063     23063     53634    0.0 |    72130    72130     54415     54415    126545    0.0 |  135.9
MISC        |    15336    11276      4716      4383     15659   21.9 |    26332    21084      9141      1217     22300   37.1 |   42.4
--------------------------------------------------------------------------------------------------------------------------------
            |   291619    59622     45701     44213    103835   69.2 |   681118   113154     95255     65176    178330   77.0 |   71.7
```

```
Results of Cost Analysis for Region 49
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:03 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |          Proj Year = 2005            |
ID          |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |      Abs Chg     Prct Chg
------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    -717160.    130207.          0. |    -777203.    267978.          0. |     -60043.          0.0
CHEM MFG    |   -1457061.     98137.          0. |   -4102565.    309252.          0. |   -2645504.          0.0
SURF COATG  |       4994.        22.        227. |    1474396.      6293.        234. |    1469402.      29423.4
FUEL COMB   |          0.       726.          0. |          0.      1347.          0. |          0.          0.0
SOLV PURCH  |          0.         0.          0. |          0.         0.          0. |          0.          0.0
MISC        |     975246.      4393.        222. |    3013983.     13172.        229. |    2038737.        209.0
------------------------------------------------------------------------------------------------------------------
            |   -1193981.    233485.          0. |    -391389.    598042.          0. |     802592.          0.0
```

```
Results of Emission Projection for Region  50
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:03 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                   Proj Year = 2005                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      112      112        0        0      112   0.0 |      130       44        0        0       44  66.0 |  -60.6
CHEM MFG    |    99269      556        0        0      556  99.4 |   219234     1160        0        0     1160  99.5 |  108.6
FUEL COMB   |    10152    10152        0        0    10152   0.0 |     9451     9451        0        0     9451   0.0 |   -6.9
SOLV PURCH  |    21768    21768        0        0    21768   0.0 |    43678    43678        0        0    43678   0.0 |  100.7
MISC        |    10786    10786        0        0    10786   0.0 |    16805     5368        0        0     5368  68.1 |  -50.2
-----------------------------------------------------------------------------------------------------------------------------
            |   142087    43374        0        0    43374  69.5 |   289298    59701        0        0    59701  79.4 |   37.6
```

```
Results of Cost Analysis for Region 50
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:03 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980            |         Proj Year = 2005             |
ID          |         Cost     Emis Red  Cost Eff |         Cost     Emis Red  Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |           0.           0.        0. |       19030.          86.      222. |       19030.        0.0
CHEM MFG    |     7277019.       98713.       74. |    17086100.      218074.       78. |     9809077.      134.8
FUEL COMB   |           0.           0.        0. |           0.           0.        0. |           0.        0.0
SOLV PURCH  |           0.           0.        0. |           0.           0.        0. |           0.        0.0
MISC        |           0.           0.        0. |     2538957.       11437.      222. |     2538957.        0.0
-------------------------------------------------------------------------------------------------------------
            |     7277019.       98713.       74. |    19644080.      229597.       86. |    12367070.      169.9
```

```
Results of Emission Projection for Region  51
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:03 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                   Proj Year = 2005                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    20474    12043    12043  41.2 |        0        0    31990     1077     1077  96.6 |  -91.1
CHEM MFG    |        0        0    10221     8659     8659  15.3 |        0        0    21844       99       99  99.5 |  -98.9
SURF COATG  |        0        0    68649    44623    44623  35.0 |        0        0   115346     4260     4260  96.3 |  -90.5
FUEL COMB   |        0        0     4906     4906     4906   0.0 |        0        0     7140     7140     7140   0.0 |   45.5
SOLV PURCH  |        0        0   115263   115263   115263   0.0 |        0        0   240027   240027   240027   0.0 |  108.2
MISC        |        0        0    14851     6931     6931  53.3 |        0        0    30433     7614     7614  75.0 |    9.9
-----------------------------------------------------------------------------------------------------------------------------
            |        0        0   234364   192425   192425  17.9 |        0        0   446781   260218   260218  41.8 |   35.2
```

```
Results of Cost Analysis for Region 51
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:03 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980            |         Proj Year = 2005             |
ID          |         Cost     Emis Red  Cost Eff |         Cost     Emis Red  Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |    18521100.        8431.     2197. |    70624050.       30913.     2285. |    52102940.      281.3
CHEM MFG    |      102568.        1562.       66. |     3030071.       21745.      139. |     2927503.     2854.2
SURF COATG  |     7347002.       24026.      306. |    40858800.      111086.      368. |    33511790.      456.1
FUEL COMB   |           0.           0.        0. |           0.           0.        0. |           0.        0.0
SOLV PURCH  |           0.           0.        0. |           0.           0.        0. |           0.        0.0
MISC        |       87912.        7920.       11. |     1005322.       22819.       44. |      917410.     1043.6
-------------------------------------------------------------------------------------------------------------
            |    26058580.       41939.      621. |   115518200.      186563.      619. |    89459650.      343.3
```

```
Results of Emission Projection for Region  52
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:04 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat      |                   Base Year = 1980                    |                Proj Year = 2005                  |
ID           | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM    |    18750    16983        0         0    16983    9.4  |    17001     6409        0        0     6409  62.3 |  -62.3
CHEM MFG     |       10        0        0         0        0  100.0  |       14        0        0        0        0 100.0 |    0.0
FUEL COMB    |    12318    12318        0         0    12318    0.0  |    11420    11420        0        0    11420   0.0 |   -7.3
SOLV PURCH   |     1102     1102        0         0     1102    0.0  |     2403     2403        0        0     2403   0.0 |  118.0
MISC         |     1552     1552        0         0     1552    0.0  |     2586     2396        0        0     2396   7.4 |   54.4
------------------------------------------------------------------------------------------------------------------------------
             |    33732    31955        0         0    31955    5.3  |    33424    22627        0        0    22627  32.3 |  -29.2
```

```
Results of Cost Analysis for Region 52
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:04 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat      |        Base Year = 1980             |         Proj Year = 2005              |
ID           |          Cost     Emis Red  Cost Eff |          Cost     Emis Red  Cost Eff |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM    |      2483699.       1767.      1406. |      2732978.      10592.      258. |     249279.       10.0
CHEM MFG     |         -150.         10.         0. |         -213.         14.        0. |        -63.        0.0
FUEL COMB    |            0.          0.         0. |            0.          0.        0. |          0.        0.0
SOLV PURCH   |            0.          0.         0. |            0.          0.        0. |          0.        0.0
MISC         |            0.          0.         0. |        42273.        190.      222. |      42273.        0.0
-----------------------------------------------------------------------------------------------------------
             |      2483549.       1777.      1398. |      2775039.      10796.      257. |     291490.       11.7
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:04 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat      |                   Base Year = 1980                    |                Proj Year = 2005                  |
ID           | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr    LOC  | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM    |  2261926   419131  5995826    850400  1269531   84.6  |  3300651   271677  8622876    72759   344436  97.1 |  -72.9
CHEM MFG     |  9029663   422308  6814311    668432  1090740   93.1  | 20271858   914907 15837728    10174   925082  97.4 |  -15.2
SURF COATG   |  1408711   394641  1728687   1210559  1605200   48.8  |  3034178   781124  3579201   105353   886477  86.6 |  -44.8
FUEL COMB    |   649795   607706   442590    433741  1041447    4.7  |   741969   667584   545340   522804  1190388   7.5 |   14.3
SOLV PURCH   |  1355797  1355797  3240896   3240896  4596693    0.0  |  3170398  3170398  7370737  7370737 10541136   0.0 |  129.3
MISC         |   439043   281284   993342    342087   623371   56.5  |   842436   523858  1711016   154550   678408  73.4 |    8.8
------------------------------------------------------------------------------------------------------------------------------
             | 15144935  3480867 19215652   6746115 10226982   70.2  | 31361490  6329548 37666896  8236378 14565926  78.9 |   42.4
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:04 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat      |        Base Year = 1980             |         Proj Year = 2005              |
ID           |          Cost     Emis Red  Cost Eff |          Cost     Emis Red  Cost Eff |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM    |   6192942000.    6988221.       886. |  20494270000.   11579090.     1770. | 14301330000.      230.9
CHEM MFG     |   4374478000.   14753230.       297. |  10394440000.   35184500.      295. |  6019958000.      137.6
SURF COATG   |    352367600.    1532198.       230. |   1621251000.    5726902.      283. |  1268883000.      360.1
FUEL COMB    |            0.      50938.         0. |            0.      96920.        0. |           0.        0.0
SOLV PURCH   |            0.          0.         0. |            0.          0.        0. |           0.        0.0
MISC         |    214639400.     809014.       265. |    495476100.    1875044.      264. |   280836700.      130.8
-----------------------------------------------------------------------------------------------------------
             |  11134430000.   24133600.       461. |  33005430000.   54462460.      606. | 21871010000.      196.4
```

```
Results of Emission Projection for Region  1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:04 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                     |                   Proj Year = 2010                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0    32766    25804    25804  21.2 |        0        0    42689     1214     1214  97.2 |  -95.3
CHEM MFG   |        0        0   432570    24913    24913  94.2 |        0        0   971587        0        0 100.0 | -100.0
SURF COATG |        0        0     2896     2050     2050  29.2 |        0        0     7254        0        0 100.0 | -100.0
FUEL COMB  |        0        0    20614    20614    20614   0.0 |        0        0    23662    23662    23662   0.0 |   14.8
SOLV PURCH |        0        0    80407    80407    80407   0.0 |        0        0   226268   226268   226268   0.0 |  181.4
MISC       |        0        0    23980    16441    16441  31.4 |        0        0    44799    14447    14447  67.8 |  -12.1
----------------------------------------------------------------------------------------------------------------------------
           |        0        0   593233   170229   170229  71.3 |        0        0  1316258   265590   265590  79.8 |   56.0
```

```
Results of Cost Analysis for Region 1
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:04 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |           Proj Year = 2010          |
ID          |        Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |       Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM  |   10315390.      6962.      1482. |    37221300.     41475.       897. |    26905910.      260.8
CHEM MFG   |   -6094305.    407657.         0. |   -12779920.    971587.         0. |    -6685616.        0.0
SURF COATG |     192042.       846.       227. |     1696588.      7254.       234. |     1504546.      783.4
FUEL COMB  |          0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH |          0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC       |    1770546.      7539.       235. |     6954180.     30352.       229. |     5183634.      292.8
---------------------------------------------------------------------------------------------------------
           |    6183668.    423004.        15. |    33092140.   1050668.        31. |    26908480.      435.2
```

```
Results of Emission Projection for Region  3
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:04 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                     |                   Proj Year = 2010                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      925      640     3386      961     1601  62.9 |     2491      741     8984        0      741  93.5 |  -53.7
CHEM MFG   |     2931      494      791      790     1284  65.5 |     5512      933     2040        0      933  87.6 |  -27.3
SURF COATG |      645      645     2877     2877     3522   0.0 | [illegible]   1428    11210        0     1428  89.6 |  -59.4
FUEL COMB  |     3556     3556     5963     5963     9519   0.0 |     6229     6229     9685     9685    15914   0.0 |   67.2
SOLV PURCH |     8473     8473    16447    16447    24920   0.0 |    30554    30554    59308    59308    89862   0.0 |  260.6
MISC       |      140      140       84       84      224   0.0 |      297      297      264       65      363  35.4 |   61.9
----------------------------------------------------------------------------------------------------------------------------
           |    16670    13948    29548    27122    41070  11.1 |    47598    40182    91491    69059   109241  21.5 |  166.0
```

```
Results of Cost Analysis for Region 3
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:04 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |           Proj Year = 2010          |
ID          |        Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |       Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM  |    4115109.      2710.      1518. |    24699110.     10734.      2301. |    20584000.      500.2
CHEM MFG   |     -36333.      2438.         0. |      299856.      6619.        45. |      336189.        0.0
SURF COATG |          0.         0.         0. |    10590410.     12296.       861. |    10590410.        0.0
FUEL COMB  |          0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH |          0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC       |          0.         0.         0. |       44164.       199.       222. |       44164.        0.0
---------------------------------------------------------------------------------------------------------
           |    4078776.      5148.       792. |    35633530.     29848.      1194. |    31554760.      773.6
```

```
Results of Emission Projection for Region  4
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:05 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                Base Year = 1980                    |                   Proj Year = 2010                   |
ID         | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     8594     1488      300       37     1525  82.9 |    10787      865      445        0      865  92.3 |  -43.3
CHEM MFG   |    15716     7805    10350      153     7958  69.5 |    46094    22924    28967        0    22924  69.5 |  188.1
SURF COATG |     1383     1383      130      130     1513   0.0 |     3873     3854      364        0     3854   9.0 |  154.7
FUEL COMB  |    11914    11914      229      229    12143   0.0 |    12999    12999      235      235    13234   0.0 |    9.0
SOLV PURCH |    64229    64229     1311     1311    65540   0.0 |   185094   185094     3778     3778   188872   0.0 |  188.2
MISC       |     8071     1880        0        0     1880  76.7 |    25461     4519        0        0     4519  82.3 |  140.3
-------------------------------------------------------------------------------------------------------------------------------
           |   109907    88699    12320     1860    90559  25.9 |   284308   230255    33789     4013   234268  26.4 |  158.7
```

```
Results of Cost Analysis for Region 4
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:05 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |          Proj Year = 2010             |
ID         |        Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |      Abs Chg     Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM  |   16630290.      7369.       2257. |     22013330.     10367.       2123. |    5383036.        32.4
CHEM MFG   |    1081718.     18108.         60. |      4084408.     52137.         78. |    3002690.       277.6
SURF COATG |          0.         0.          0. |       103537.       383.        270. |     103537.         0.0
FUEL COMB  |          0.         0.          0. |            0.         0.          0. |          0.         0.0
SOLV PURCH |          0.         0.          0. |            0.         0.          0. |          0.         0.0
MISC       |    1374402.      6191.        222. |      4649256.     20943.        222. |    3274854.       238.3
-----------------------------------------------------------------------------------------------------------------
           |   19086410.     31668.        603. |     30850530.     83830.        368. |   11764120.        61.6
```

```
Results of Emission Projection for Region  5
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:05 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                Base Year = 1980                    |                   Proj Year = 2010                   |
ID         | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0   935714   196609   196609  79.0 |        0        0  1590704     1842     1842  99.9 |  -99.1
CHEM MFG   |        0        0    34451    23334    23334  32.3 |        0        0    97298        0        0 100.0 | -100.0
SURF COATG |        0        0   191901   127669   127669  33.5 |        0        0   603734        0        0 100.0 | -100.0
FUEL COMB  |        0        0    48125    46406    46406   3.6 |        0        0    73417    69620    69620   5.2 |   50.0
SOLV PURCH |        0        0   426532   426532   426532   0.0 |        0        0  1307890  1307890  1307890   0.0 |  206.6
MISC       |        0        0   189824    27657    27657  85.4 |        0        0   421747    27167    27167  93.6 |   -1.8
-------------------------------------------------------------------------------------------------------------------------------
           |        0        0  1826547   848207   848207  53.6 |        0        0  4094791  1406519  1406519  65.7 |   65.8
```

```
Results of Cost Analysis for Region 5
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:05 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |          Proj Year = 2010             |
ID         |        Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |      Abs Chg     Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM  |  639971300.    739105.        866. |   2960330000.   1588862.      1863. | 2320359000.       362.6
CHEM MFG   |    1505059.     11117.        135. |     13110040.     97298.       135. |   11604980.       771.1
SURF COATG |   32424240.     64232.        505. |    288487200.    603734.       478. |  256063000.       789.7
FUEL COMB  |          0.      1719.          0. |            0.      3797.         0. |          0.         0.0
SOLV PURCH |          0.         0.          0. |            0.         0.         0. |          0.         0.0
MISC       |   35980550.    162167.        222. |     89576940.    394580.       227. |   53596400.       149.0
-----------------------------------------------------------------------------------------------------------------
           |  709881200.    978340.        726. |   3351505000.   2688272.      1247. | 2641624000.       372.1
```

```
Results of Emission Projection for Region  6
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:05 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                  Proj Year = 2010                    |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     2122     1778    12469     1962     3740  74.4 |     4862      508    23083       23      531  98.1 |  -85.8
CHEM MFG    |     5657     3414     3221     1521     4935  44.4 |    29905    19825    10350        0    19825  50.8 |  301.7
SURF COATG  |      483      483     6997     6430     6913   7.6 |      963      864    13933        0      864  94.2 |  -87.5
FUEL COMB   |     4200     3583     3829     3658     7241   9.8 |     7718     5762     6376     4948    10710  24.0 |   47.9
SOLV PURCH  |    16741    16741    19652    19652    36393   0.0 |    61155    61155    71789    71789   132943   0.0 |  265.3
MISC        |     3870     2963      999      999     3962  18.6 |     9584     7926     2452     1093     9019  25.1 |  127.6
------------------------------------------------------------------------------------------------------------------------------
            |    33073    28962    47167    34222    63184  21.3 |   114186    96039   127981    77853   173892  28.2 |  175.2
```

```
Results of Cost Analysis for Region 6
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:05 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980             |           Proj Year = 2010              |
ID          |        Cost     Emis Red     Cost Eff |           Cost     Emis Red     Cost Eff |        Abs Chg     Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |    9759443.       10851.         899. |      48090970.       27414.        1754. |      38331530.        392.8
CHEM MFG    |     493911.        3943.         125. |       3338205.       20430.         163. |       2844294.        575.9
SURF COATG  |     128709.         567.         227. |       3703862.       14031.         264. |       3575153.       2777.7
FUEL COMB   |          0.         788.           0. |             0.        3383.           0. |             0.          0.0
SOLV PURCH  |          0.           0.           0. |             0.           0.           0. |             0.          0.0
MISC        |     438954.         907.         484. |       1456478.        3016.         483. |       1017524.        231.8
-----------------------------------------------------------------------------------------------------------
            |   10821020.       17056.         634. |      56589520.       68275.         829. |      45768500.        423.0
```

```
Results of Emission Projection for Region  7
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:06 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                  Proj Year = 2010                    |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0     3047      995      995  67.3 |        0        0     6841        0        0 100.0 | -100.0
CHEM MFG    |        0        0    11761     3327     3327  71.7 |        0        0    38894        0        0 100.0 | -100.0
SURF COATG  |        0        0    53122    36053    36053  32.1 |        0        0   117814        0        0 100.0 | -100.0
FUEL COMB   |        0        0      565      565      565   0.0 |        0        0     1063     1063     1063   0.0 |   88.1
SOLV PURCH  |        0        0   100324   100324   100324   0.0 |        0        0   280568   280568   280568   0.0 |  179.7
MISC        |        0        0     4256     3046     3046  28.4 |        0        0     6005      140      140  97.7 |  -95.4
------------------------------------------------------------------------------------------------------------------------------
            |        0        0   173075   144310   144310  16.6 |        0        0   451185   281771   281771  37.5 |   95.3
```

```
Results of Cost Analysis for Region 7
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:06 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980             |           Proj Year = 2010              |
ID          |        Cost     Emis Red     Cost Eff |           Cost     Emis Red     Cost Eff |        Abs Chg     Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |     983585.        2052.         479. |       3875920.        6841.         567. |       2892335.        294.1
CHEM MFG    |    1388580.        8434.         165. |       6764812.       38894.         174. |       5376232.        387.2
SURF COATG  |    4706528.       17069.         276. |      27310410.      117814.         232. |      22603880.        480.3
FUEL COMB   |          0.           0.           0. |             0.           0.           0. |             0.          0.0
SOLV PURCH  |          0.           0.           0. |             0.           0.           0. |             0.          0.0
MISC        |     119596.        1210.          99. |        782537.        5864.         133. |        662941.        554.3
-----------------------------------------------------------------------------------------------------------
            |    7198289.       28765.         250. |      38733680.      169414.         229. |      31535390.        438.1
```

```
Results of Emission Projection for Region  8
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:06 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                    Base Year = 1980                  |                    Proj Year = 2010                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC   | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC   |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      192       40    14942     7000     7040  53.5   |      311       18    21553      333      352  98.4   |  -95.0
CHEM MFG    |     8825      809   312904     4190     4999  98.4   |    16957     1554   707874        0     1554  99.8   |  -68.9
SURF COATG  |        0        0    47712    12965    12965  72.8   |        0        0   118791        0        0 100.0   | -100.0
FUEL COMB   |       57       57      176      176      233   0.0   |      102      102      358      358      460  -0.0   |   97.5
SOLV PURCH  |      517      517    12402    12402    12919   0.0   |     1370     1370    32867    32867    34237   0.0   |  165.0
MISC        |      112      112    75436      342      454  99.4   |      174      174   172036       11      185  99.9   |  -59.2
-----------------------------------------------------------------------------------------------------------------------------
            |     9703     1535   463572    37075    38610  91.8   |    18915     3220  1053480    33569    36789  96.6   |   -4.7


Results of Cost Analysis for Region 8
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:06 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |         Proj Year = 2010                 |
ID          |        Cost     Emis Red    Cost Eff |          Cost     Emis Red    Cost Eff   |       Abs Chg     Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |   18867110.        8094.       2331. |     74768360.       21512.       3476.   |     55901250.        296.3
CHEM MFG    |   -4129055.      316730.          0. |     -3433217.      723277.          0.   |       695838.          0.0
SURF COATG  |    7887569.       34747.        227. |     26951640.      118791.        227.   |     19064070.        241.7
FUEL COMB   |          0.          0.          0. |            0.          -0.          0.   |            0.          0.0
SOLV PURCH  |          0.          0.          0. |            0.           0.          0.   |            0.          0.0
MISC        |   10776760.       75094.        144. |     24329140.      172026.        141.   |     13552370.        125.8
---------------------------------------------------------------------------------------------------------------
            |   33402390.      434665.         77. |    122615900.     1035605.        118.   |     89213530.        267.1


Results of Emission Projection for Region  9
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:06 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                    Base Year = 1980                  |                    Proj Year = 2010                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC   | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC   |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0      210       21       21  90.0   |        0        0      302        0        0 100.0   | -100.0
SURF COATG  |        0        0      171      150      150  12.3   |        0        0      364        0        0 100.0   | -100.0
FUEL COMB   |        0        0       37       37       37   0.0   |        0        0       56       56       56   0.0   |   52.7
SOLV PURCH  |        0        0     5182     5182     5182   0.0   |        0        0    12942    12942    12942   0.0   |  149.7
MISC        |        0        0      758      758      758   0.0   |        0        0     1655        0        0 100.0   | -100.0
-----------------------------------------------------------------------------------------------------------------------------
            |        0        0     6358     6148     6148   3.3   |        0        0    15319    12999    12999  15.1   |  111.4


Results of Cost Analysis for Region 9
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:06 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |         Proj Year = 2010                 |
ID          |        Cost     Emis Red    Cost Eff |          Cost     Emis Red    Cost Eff   |       Abs Chg     Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |      69552.         189.        368. |       110955.         302.        368.   |        41403.         59.5
SURF COATG  |       7398.          21.        352. |       262846.         364.        722.   |       255448.       3452.9
FUEL COMB   |          0.          0.          0. |            0.           0.          0.   |            0.          0.0
SOLV PURCH  |          0.          0.          0. |            0.           0.          0.   |            0.          0.0
MISC        |          0.          0.          0. |       367450.        1655.        222.   |       367450.          0.0
---------------------------------------------------------------------------------------------------------------
            |      76950.         210.        366. |       741251.        2321.        319.   |       664301.        863.3
```

```
Results of Emission Projection for Region  10
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:07 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                    Base Year = 1980                   |                   Proj Year = 2010                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1274     1103     5211     4679     5782  10.8 |     3529     2542    13824        3     2545  85.3 |  -56.0
CHEM MFG    |        0        0     3032     3030     3030   0.1 |        0        0    12606        0        0 100.0 | -100.0
SURF COATG  |      908      908     8633     7931     8839   7.4 |     3553     2978    33017        0     2978  91.9 |  -66.3
FUEL COMB   |     2661     2661     1036     1036     3697   0.0 |     5043     5043     1700     1700     6743   0.0 |   82.4
SOLV PURCH  |    24556    24556    87063    87063   111619   0.0 |    84759    84759   300510   300510   385269   0.0 |  245.2
MISC        |        0        0     1204      135      135  88.8 |        0        0     3181      271      271  91.5 |  100.7
------------------------------------------------------------------------------------------------------------------------------
            |    29399    29228   106179   103874   133102   1.8 |    96883    95321   364838   302485   397806  13.8 |  198.9
```

```
Results of Cost Analysis for Region 10
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:07 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980           |          Proj Year = 2010            |
ID          |         Cost    Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1638693.        703.      2331. |     11000220.     14808.       743. |     9361527.       571.3
CHEM MFG    |         -30.          2.         0. |      2796928.     12606.       222. |     2796958.         0.0
SURF COATG  |      159354.        702.       227. |      7930493.     33592.       236. |     7771139.      4876.7
FUEL COMB   |           0.          0.         0. |            0.         0.         0. |           0.         0.0
SOLV PURCH  |           0.          0.         0. |            0.         0.         0. |           0.         0.0
MISC        |      194214.       1069.       182. |       547767.      2910.       188. |      353553.       182.0
--------------------------------------------------------------------------------------------------------------
            |     1992231.       2476.       805. |     22275410.     63916.       349. |    20283180.      1018.1
```

```
Results of Emission Projection for Region  11
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:07 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                    Base Year = 1980                   |                   Proj Year = 2010                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    20368     3222     3222  84.2 |        0        0    33992       28       28  99.9 |  -99.1
CHEM MFG    |        0        0     5541     1505     1505  72.8 |        0        0    15074        0        0 100.0 | -100.0
SURF COATG  |        0        0    15742    15588    15588   1.0 |        0        0    43168        0        0 100.0 | -100.0
FUEL COMB   |        0        0     9449     9449     9449   0.0 |        0        0    18259    18259    18259   0.0 |   93.2
SOLV PURCH  |        0        0   121011   121011   121011   0.0 |        0        0   316070   316070   316070   0.0 |  161.2
MISC        |        0        0    15388     1507     1507  90.2 |        0        0    25747      834      834  96.8 |  -44.7
------------------------------------------------------------------------------------------------------------------------------
            |        0        0   187499   152282   152282  18.8 |        0        0   452310   335191   335191  25.9 |  120.1
```

```
Results of Cost Analysis for Region 11
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:07 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980           |          Proj Year = 2010            |
ID          |         Cost    Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |    10091110.      17146.       589. |     60438620.     33964.      1779. |    50347510.       498.9
CHEM MFG    |      490829.       4036.       122. |      5792248.     15074.       384. |     5301419.      1080.1
SURF COATG  |       34958.        154.       227. |      9799144.     43168.       227. |     9764186.     27931.2
FUEL COMB   |           0.          0.         0. |            0.         0.         0. |           0.         0.0
SOLV PURCH  |           0.          0.         0. |            0.         0.         0. |           0.         0.0
MISC        |     3023910.      13881.       218. |      5391007.     24913.       216. |     2367097.        78.3
--------------------------------------------------------------------------------------------------------------
            |    13640810.      35217.       387. |     81421020.    117119.       695. |    67780220.       496.9
```

```
Results of Emission Projection for Region  13
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:07 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                      |                  Proj Year = 2010                     |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      599       599        0         0      599   0.0 |     1000      119         0         0      119  88.1 |   -80.1
CHEM MFG    |      236       236        0         0      236   0.0 |      656      656         0         0      656   0.0 |   177.8
FUEL COMB   |     1551      1551        0         0     1551   0.0 |     2767     2767         0         0     2767   0.0 |    78.4
SOLV PURCH  |    12392     12392        0         0    12392   0.0 |    34539    34539         0         0    34539   0.0 |   178.7
MISC        |     3000      3000        0         0     3000   0.0 |     5500     5500         0         0     5500   0.0 |    83.3
----------------------------------------------------------------------------------------------------------------------------
            |    17778     17778        0         0    17778   0.0 |    44462    43581         0         0    43581   2.0 |   145.1
```

```
Results of Cost Analysis for Region 13
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:07 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980              |          Proj Year = 2010              |
ID          |        Cost    Emis Red    Cost Eff |           Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |          0.          0.          0. |      -130371.        881.          0. |     -130371.         0.0
CHEM MFG    |          0.          0.          0. |            0.          0.          0. |           0.         0.0
FUEL COMB   |          0.          0.          0. |            0.          0.          0. |           0.         0.0
SOLV PURCH  |          0.          0.          0. |            0.          0.          0. |           0.         0.0
MISC        |          0.          0.          0. |            0.          0.          0. |           0.         0.0
-------------------------------------------------------------------------------------------------------------
            |          0.          0.          0. |      -130371.        881.          0. |     -130371.         0.0
```

```
Results of Emission Projection for Region  14
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:08 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                      |                  Proj Year = 2010                     |
ID          | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0         0   224238     46435    46435  79.3 |        0        0    356400       569      569  99.8 |   -98.8
CHEM MFG    |        0         0    52015     13660    13660  73.7 |        0        0    128188         0        0 100.0 |  -100.0
SURF COATG  |        0         0   180144    132027   132027  26.7 |        0        0    373305         0        0 100.0 |  -100.0
FUEL COMB   |        0         0     6899      6899     6899   0.0 |        0        0      8446      8446     8446   0.0 |    22.4
SOLV PURCH  |        0         0   246769    246769   246769   0.0 |        0        0    531808    531808   531808   0.0 |   115.5
MISC        |        0         0    48734      9809     9809  79.9 |        0        0     44590       158      158  99.6 |   -98.4
----------------------------------------------------------------------------------------------------------------------------
            |        0         0   758799    455599   455599  40.0 |        0        0   1442737    540982   540982  62.5 |    18.7
```

```
Results of Cost Analysis for Region 14
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:08 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980              |          Proj Year = 2010              |
ID          |        Cost    Emis Red    Cost Eff |           Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |  384486600.    177803.       2162. |   1424434000.    355832.       4003. |  1039947000.       270.5
CHEM MFG    |    5529080.     38355.        144. |     30666680.    120188.        239. |    25137600.       454.6
SURF COATG  |    8659682.     48117.        180. |    103433600.    373305.        277. |    94773930.      1094.4
FUEL COMB   |          0.          0.          0. |            0.          0.          0. |           0.         0.0
SOLV PURCH  |          0.          0.          0. |            0.          0.          0. |           0.         0.0
MISC        |    8638698.     38925.        222. |      9601574.     44431.        216. |      962876.        11.1
-------------------------------------------------------------------------------------------------------------
            |  407314000.    303200.       1343. |   1568136000.    901755.       1739. |  1160822000.       285.0
```

```
Results of Emission Projection for Region  15
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:08 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                    |                 Proj Year = 2010                    |
ID         | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   156517    11491      3781      2322     13813  91.4 |   214892     7645      5144        21      7666  96.5 |  -44.5
CHEM MFG   |   267841    12558    718440      7996     20554  97.9 |   463614    22906   1277567         0     22906  98.7 |   11.4
SURF COATG |   232564    51084      7519      4378     55462  76.9 |   518631   107860     16097         0    107860  79.8 |   94.5
FUEL COMB  |    10890    10866       308       308     11174   0.2 |    14116    14065       597       596     14660   0.4 |   31.2
SOLV PURCH |   152202   152202     20755     20755    172957   0.0 |   384097   384097     52377     52377    436474   0.0 |  152.4
MISC       |    29461    16165       561       280     16445  45.2 |    57378    13709      1027       113     13822  76.3 |  -16.0
---------------------------------------------------------------------------------------------------------------------------
           |   849475   254366    751364     36039    290405  81.9 |  1652727   550282   1352809     53107    603389  79.9 |  107.8


Results of Cost Analysis for Region 15
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:08 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980           |           Proj Year = 2010           |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |   89383120.     146485.        610. |  139584400.     212369.        657. |     50201230.        56.2
CHEM MFG   |  -46995860.     965727.          0. |  -61926500.    1718274.          0. |    -14930630.         0.0
SURF COATG |   41104740.     184621.        223. |  108450700.     426868.        254. |     67345920.       163.8
FUEL COMB  |          0.         24.          0. |          0.         53.          0. |            0.         0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |            0.         0.0
MISC       |    3012096.      13577.        222. |    9893793.      44583.        222. |      6881697.       228.5
--------------------------------------------------------------------------------------------------------------
           |   86504100.    1310434.         66. |  196002300.    2402147.         82. |    109498200.       126.6


Results of Emission Projection for Region  16
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:08 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                    |                 Proj Year = 2010                    |
ID         | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC | Unc Attn Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      111      111         0         0       111   0.0 |      139       17         0         0        17  87.8 |  -84.6
CHEM MFG   |   108754    24323         0         0     24323  77.6 |   260483    50951         0         0     50951  80.4 |  109.5
SURF COATG |     3661     3549         0         0      3549   3.1 |     7857     4476         0         0      4476  43.0 |   26.1
FUEL COMB  |     5475     5475         0         0      5475   0.0 |     5869     5869         0         0      5869   0.0 |    7.2
SOLV PURCH |    68776    68776         0         0     68776   0.0 |   144364   144364         0         0    144364   0.0 |  109.9
MISC       |      788      738         0         0       738   6.3 |     1327     1225         0         0      1225   7.7 |   65.9
---------------------------------------------------------------------------------------------------------------------------
           |   187565   102972         0         0    102972  45.1 |   420038   206902         0         0    206902  50.7 |  100.9


Results of Cost Analysis for Region 16
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:08 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980           |           Proj Year = 2010           |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |          0.          0.          0. |      27507.        122.        225. |        27507.         0.0
CHEM MFG   |   -1048219.      84431.          0. |   -2092045.     209532.          0. |     -1043826.         0.0
SURF COATG |      25424.        112.        227. |     566509.       3381.        168. |       541085.      2128.2
FUEL COMB  |          0.          0.          0. |          0.          0.          0. |            0.         0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |            0.         0.0
MISC       |      11364.         50.        227. |      22961.        102.        225. |        11597.       102.1
--------------------------------------------------------------------------------------------------------------
           |   -1011431.      84593.          0. |   -1475068.     213137.          0. |      -463637.         0.0
```

```
Results of Emission Projection for Region  17
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:09 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                  |                 Proj Year = 2010                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   216620    22611     8215     4282    26893  88.0 |   356790    21664    13163       50    21714  94.1 |  -19.3
CHEM MFG    |     3745     3745       43       43     3788   0.0 |     9471     9338      108        0     9338   2.5 |  146.5
SURF COATG  |     2651     2651     2743     2743     5394   0.0 |     6749     4011     6545        0     4011  69.8 |  -25.6
FUEL COMB   |    79920    79920     4659     4659    84579   0.0 |    84566    84566     4400     4400    88966   0.0 |    5.2
SOLV PURCH  |    35310    35310     4364     4364    39674   0.0 |    99732    99732    12326    12326   112058   0.0 |  182.4
MISC        |      328      328     1472     1472     1800   0.0 |      655      655     2871     2484     3139  11.0 |   74.4
-------------------------------------------------------------------------------------------------------------------------------
            |   338574   144565    21496    17563   162128  55.0 |   557963   219966    39412    19259   239226  60.0 |   47.6
```

```
Results of Cost Analysis for Region 17
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:09 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |         Proj Year = 2010             |
ID          |          Cost    Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |     Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |    461402800.     197942.      2331. |    774421200.     348239.      2224. |  313018400.        67.8
CHEM MFG    |            0.          0.         0. |       355116.        241.      1473. |     355116.         0.0
SURF COATG  |            0.          0.         0. |      2725295.       9283.       294. |    2725295.         0.0
FUEL COMB   |            0.          0.         0. |            0.          0.         0. |          0.         0.0
SOLV PURCH  |            0.          0.         0. |            0.          0.         0. |          0.         0.0
MISC        |            0.          0.         0. |        85886.        387.       222. |      85886.         0.0
-------------------------------------------------------------------------------------------------------------
            |    461402800.     197942.      2331. |    777587600.     358150.      2171. |  316184800.        68.5
```

```
Results of Emission Projection for Region  18
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:09 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                  |                 Proj Year = 2010                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1906      573    41135    20019    20592  52.2 |     3704      348    74911      233      581  99.3 |  -97.2
CHEM MFG    |     7839     4842   157562    69345    74187  55.1 |    15622    12073   454984        0    12073  97.4 |  -83.7
SURF COATG  |     1776     1662    40529    18404    20066  52.6 |     4577     1966   108305        0     1966  98.3 |  -90.2
FUEL COMB   |     1822      367     5630     5232     5599  24.9 |     4006     1128     7398     5829     6957  39.0 |   24.3
SOLV PURCH  |     3533     3533    46945    46945    50478   0.0 |     9429     9429   125292   125292   134722   0.0 |  166.9
MISC        |     2512     1057    19668     6969     8026  63.8 |     5557     1488    42253     8967    10454  78.1 |   30.3
-------------------------------------------------------------------------------------------------------------------------------
            |    19388    12034   311469   166914   178948  45.9 |    42896    26432   813143   140320   166753  80.5 |   -6.8
```

```
Results of Cost Analysis for Region 18
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:09 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980            |         Proj Year = 2010             |
ID          |          Cost    Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |     Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |     45137620.      22449.      2011. |    202753600.      78035.      2598. |  157616000.       349.2
CHEM MFG    |      3465031.      91214.        38. |     75517940.     458533.       165. |   72052900.      2079.4
SURF COATG  |      3892722.      22239.       175. |     33917570.     110915.       306. |   30024850.       771.3
FUEL COMB   |            0.       1853.         0. |            0.       4447.         0. |          0.         0.0
SOLV PURCH  |            0.          0.         0. |            0.          0.         0. |          0.         0.0
MISC        |      3150084.      14154.       223. |      8706010.      37356.       233. |    5555926.       176.4
-------------------------------------------------------------------------------------------------------------
            |     55645460.     151909.       366. |    320895200.     689286.       466. |  265249700.       476.7
```

```
Results of Emission Projection for Region  19
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:09 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                |                   Proj Year = 2010                 |
ID          | Unc Attn Ctr Attn    Unc NA   Ctr NA  Tot Ctr  LOC | Unc Attn Ctr Attn  Unc NA   Ctr NA Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    700999   103958   103958 85.2 |        0        0 1468821      436     436 100.0 |  -99.6
CHEM MFG    |        0        0    955331   176474   176474 81.5 |        0        0 3787029        0       0 100.0 | -100.0
SURF COATG  |        0        0     12269    10850    10850 11.6 |        0        0   26500        0       0 100.0 | -100.0
FUEL COMB   |        0        0     36288    31269    31269 13.8 |        0        0   47207    40715   40715  13.8 |   30.2
SOLV PURCH  |        0        0     39957    39957    39957  0.0 |        0        0   94178    94178   94178   0.0 |  135.7
MISC        |        0        0     10728    10212    10212  4.8 |        0        0   23014     3764    3764  83.6 |  -63.1
-------------------------------------------------------------------------------------------------------------------------------
            |        0        0   1755572   372720   372720 78.8 |        0        0 5446748   139093  139093  97.4 |  -62.7


Results of Cost Analysis for Region 19
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:09 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980            |         Proj Year = 2010             |
ID          |        Cost    Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |         Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   | 1214326000.     597041.      2034. | 5913065000.   1468385.      4027. |    4698740000.       386.9
CHEM MFG    |   71472330.     778857.        92. |  336795100.   3787029.        89. |     265322800.       371.2
SURF COATG  |     322113.       1419.       227. |    6015429.     26500.       227. |       5693316.      1767.5
FUEL COMB   |          0.       5019.         0. |          0.      6492.         0. |             0.         0.0
SOLV PURCH  |          0.          0.         0. |          0.         0.         0. |             0.         0.0
MISC        |      95238.        516.       185. |    4234928.     19250.       220. |       4139690.      4346.7
-----------------------------------------------------------------------------------------------------------------
            | 1286216000.    1382852.       930. | 6260111000.   5307655.      1179. |    4973895000.       386.7


Results of Emission Projection for Region  20
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:10 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                |                   Proj Year = 2010                 |
ID          | Unc Attn Ctr Attn    Unc NA   Ctr NA  Tot Ctr  LOC | Unc Attn Ctr Attn  Unc NA   Ctr NA Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     5828     5600      6133     6133    11733  1.9 |    12576     3645   13100       37    3682  85.7 |  -68.6
CHEM MFG    |        0        0      2702     2702     2702  0.0 |        0        0    7977        0       0 100.0 | -100.0
SURF COATG  |      177      177      6900     3630     3807 46.2 |      375      193   14828        0     193  98.7 |  -94.9
FUEL COMB   |      573      573       667      667     1240  0.0 |     1235     1235    1499     1499    2734   0.0 |  120.5
SOLV PURCH  |     7463     7463     13860    13860    21323  0.0 |    21100    21100   39187    39187   60287   0.0 |  182.7
MISC        |      648      648       194      191      839  0.4 |     1200     1200     562        0    1200  31.9 |   43.0
-------------------------------------------------------------------------------------------------------------------------------
            |    14689    14461     30456    27183    41644  7.8 |    36485    27373   77153    40723   68096  40.1 |   63.5


Results of Cost Analysis for Region 20
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:10 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980            |         Proj Year = 2010             |
ID          |        Cost    Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |         Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   |     531468.        228.      2331. |    4669478.     21994.       212. |       4138010.       778.6
CHEM MFG    |          0.          0.         0. |    1936085.      7977.       243. |       1936085.         0.0
SURF COATG  |     742290.       3270.       227. |    4205927.     15010.       280. |       3463637.       466.6
FUEL COMB   |          0.          0.         0. |          0.         0.         0. |             0.         0.0
SOLV PURCH  |          0.          0.         0. |          0.         0.         0. |             0.         0.0
MISC        |        258.          3.        86. |     118554.       562.       211. |        118296.     45851.1
-----------------------------------------------------------------------------------------------------------------
            |    1274016.       3501.       364. |   10930040.     45543.       240. |       9656027.       757.9
```

```
Results of Emission Projection for Region  21
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:10 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                Base Year = 1980                    |               Proj Year = 2010                    |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   266372    32364        0        0    32364  87.9 |   526063    14237        0        0    14237  97.3 |  -56.0
CHEM MFG   |    69931     3582        0        0     3582  94.9 |   159739     7704        0        0     7704  95.2 |  115.1
SURF COATG |    22226    19548       85       85    19633  12.0 |    40957    21879      150        0    21879  46.8 |   11.4
FUEL COMB  |     2559     2559       24       24     2583   0.0 |     3653     3653       33       33     3686   0.0 |   42.7
SOLV PURCH |    64450    64450      641      641    65091   0.0 |   147242   147242     1464     1464   148706   0.0 |  128.5
MISC       |    64555    18928     1454      257    19185  70.9 |   119148    27229     1600       79    27308  77.4 |   42.3
--------------------------------------------------------------------------------------------------------------------------------
           |   490093   141431     2204     1007   142438  71.1 |   996802   221943     3248     1576   223519  77.6 |   56.9
```

```
Results of Cost Analysis for Region 21
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:10 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980             |           Proj Year = 2010            |
ID         |         Cost    Emis Red   Cost Eff   |         Cost    Emis Red   Cost Eff   |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     5568460.     234008.        24.   |     9527079.     511826.        19.   |     3958619.        71.1
CHEM MFG   |   116262600.      66349.      1752.   |   279889400.     152035.      1841.   |   163626800.       140.7
SURF COATG |     1356315.       2678.       506.   |    14560180.      19229.       757.   |    13203860.       973.5
FUEL COMB  |          0.          0.         0.   |          0.          0.         0.   |          0.          0.0
SOLV PURCH |          0.          0.         0.   |          0.          0.         0.   |          0.          0.0
MISC       |     9935896.      46824.       212.   |    20176750.      93441.       216.   |    10240850.       103.1
-------------------------------------------------------------------------------------------------------------------
           |   133123300.     349859.       381.   |   324153300.     776531.       417.   |   191030100.       143.5
```

```
Results of Emission Projection for Region  22
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:10 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                Base Year = 1980                    |               Proj Year = 2010                    |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0    13399    10197    10197  23.9 |        0        0    23411        0        0 100.0 | -100.0
CHEM MFG   |        0        0     8511     8498     8498   0.2 |        0        0    14087        0        0 100.0 | -100.0
SURF COATG |        0        0    43410    42534    42534   2.0 |        0        0    72105        0        0 100.0 | -100.0
FUEL COMB  |        0        0    30471    30471    30471   0.0 |        0        0    53761    53761    53761   0.0 |   76.4
SOLV PURCH |        0        0   160850   160850   160850   0.0 |        0        0   459302   459302   459302   0.0 |  185.5
MISC       |        0        0    14104    14078    14078   0.2 |        0        0    29149       62       62  99.8 |  -99.6
--------------------------------------------------------------------------------------------------------------------------------
           |        0        0   270745   266628   266628   1.5 |        0        0   651815   513125   513125  21.3 |   92.4
```

```
Results of Cost Analysis for Region 22
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:10 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980             |           Proj Year = 2010            |
ID         |         Cost    Emis Red   Cost Eff   |         Cost    Emis Red   Cost Eff   |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     3317382.       3202.      1036.   |    15662920.      23410.       669.   |    12345540.       372.1
CHEM MFG   |        2886.         13.       222.   |    11165340.      14087.       793.   |    11162450.    386779.3
SURF COATG |     -218889.        876.         0.   |    37556470.      72105.       521.   |    37775360.         0.0
FUEL COMB  |          0.          0.         0.   |          0.          0.         0.   |          0.          0.0
SOLV PURCH |          0.          0.         0.   |          0.          0.         0.   |          0.          0.0
MISC       |        4446.         26.       171.   |     9947864.      29087.       342.   |     9943418.    223648.6
-------------------------------------------------------------------------------------------------------------------
           |     3105825.       4117.       754.   |    74332590.     138690.       536.   |    71226770.      2293.3
```

```
Results of Emission Projection for Region  23
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:11 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                 Proj Year = 2010                   |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   394595    34773    34773  91.2 |        0        0   619766      662      662  99.9 |  -98.1
CHEM MFG    |        0        0    34445    34384    34384   0.2 |        0        0    80132        0        0 100.0 | -100.0
SURF COATG  |        0        0   145042   135825   135825   6.4 |        0        0   312017        0        0 100.0 | -100.0
FUEL COMB   |        0        0    13960    13960    13960   0.0 |        0        0    16421    16421    16421   0.0 |   17.6
SOLV PURCH  |        0        0   261240   261240   261240   0.0 |        0        0   654874   654874   654874   0.0 |  150.7
MISC        |        0        0    36112    23412    23412  35.2 |        0        0    58772    21572    21572  63.3 |   -7.9
----------------------------------------------------------------------------------------------------------------------------
            |        0        0   885394   503594   503594  43.1 |        0        0  1741982   693529   693529  60.2 |   37.7
```

```
Results of Cost Analysis for Region 23
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:11 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980         |          Proj Year = 2010          |
ID          |         Cost   Emis Red  Cost Eff |         Cost   Emis Red  Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |   838745100.    359822.     2331. |  2831485000.    619104.     4574. |  1992740000.      237.6
CHEM MFG    |       13542.        61.      222. |    16600900.     80132.      207. |    16587360.   122488.2
SURF COATG  |     2075429.      9217.      225. |    98647360.    312017.      316. |    96571930.     4653.1
FUEL COMB   |           0.         0.        0. |           0.         0.        0. |           0.        0.0
SOLV PURCH  |           0.         0.        0. |           0.         0.        0. |           0.        0.0
MISC        |     3394086.     12700.      267. |    10036280.     37200.      270. |     6642194.      195.7
-------------------------------------------------------------------------------------------------------------
            |   844228200.    381800.     2211. |  2956770000.   1048453.     2820. |  2112542000.      250.2
```

```
Results of Emission Projection for Region  24
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:11 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                   |                 Proj Year = 2010                   |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    26778    24304        0        0    24304   9.2 |    37605     7443        0        0     7443  80.2 |  -69.4
CHEM MFG    |     2259     2236        0        0     2236   1.0 |     5534     5410        0        0     5410   2.2 |  141.9
SURF COATG  |    36824    34337        0        0    34337   6.8 |    98834    77826        0        0    77826  21.3 |  126.7
FUEL COMB   |     5396     5396        0        0     5396   0.0 |     6157     6157        0        0     6157   0.0 |   14.1
SOLV PURCH  |    92937    92937        0        0    92937   0.0 |   280692   280692        0        0   280692   0.0 |  202.0
MISC        |     1615     1599        0        0     1599   1.0 |     3398     3361        0        0     3361   1.1 |  110.2
----------------------------------------------------------------------------------------------------------------------------
            |   165809   160809        0        0   160809   3.0 |   432220   380889        0        0   380889  11.9 |  136.9
```

```
Results of Cost Analysis for Region 24
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:11 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980         |          Proj Year = 2010          |
ID          |         Cost   Emis Red  Cost Eff |         Cost   Emis Red  Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |     2816847.      2474.     1139. |     4342205.     30162.      144. |     1525358.       54.2
CHEM MFG    |        2760.        23.      120. |       60164.       124.      484. |       57404.     2079.8
SURF COATG  |     -535868.      2487.        0. |     7261061.     21008.      346. |     7796929.        0.0
FUEL COMB   |           0.         0.        0. |           0.         0.        0. |           0.        0.0
SOLV PURCH  |           0.         0.        0. |           0.         0.        0. |           0.        0.0
MISC        |           0.        16.        0. |           0.        37.        0. |           0.        0.0
-------------------------------------------------------------------------------------------------------------
            |     2283739.      5000.      457. |    11663430.     51331.      227. |     9379691.      410.7
```

```
Results of Emission Projection for Region  25
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:11 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                   Proj Year = 2010                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    21851    21851        0        0    21851   0.0 |    29199    18224        0        0    18224  37.6 |  -16.6
CHEM MFG   |   109914     2680        0        0     2680  97.6 |   249958     5766        0        0     5766  97.7 |  115.2
SURF COATG |    10399    10399        0        0    10399   0.0 |    26452    25202        0        0    25202   4.7 |  142.3
FUEL COMB  |    37088    37088        0        0    37088   0.0 |    51206    51206        0        0    51206   0.0 |   38.1
SOLV PURCH |    57933    57933        0        0    57933   0.0 |   157610   157610        0        0   157610   0.0 |  172.1
MISC       |     4085     4085        0        0     4085   0.0 |    10183    10183        0        0    10183   0.0 |  149.3
-----------------------------------------------------------------------------------------------------------------------------
           |   241270   134036        0        0   134036  44.4 |   524607   268190        0        0   268190  48.9 |  100.1
```

```
Results of Cost Analysis for Region 25
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:11 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |          Proj Year = 2010            |
ID         |        Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |          0.          0.         0. |    -1693979.      10975.         0. |    -1693979.        0.0
CHEM MFG   |   -7291011.     107234.         0. |   -11569280.     244192.         0. |    -4278267.        0.0
SURF COATG |          0.          0.         0. |     1362507.       1250.      1090. |     1362507.        0.0
FUEL COMB  |          0.          0.         0. |          0.          0.         0. |           0.        0.0
SOLV PURCH |          0.          0.         0. |          0.          0.         0. |           0.        0.0
MISC       |          0.          0.         0. |          0.          0.         0. |           0.        0.0
--------------------------------------------------------------------------------------------------------------
           |   -7291011.     107234.         0. |   -11900750.     256417.         0. |    -4609738.        0.0
```

```
Results of Emission Projection for Region  26
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:12 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                   Proj Year = 2010                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    56190     6224     7202     4618    10842  82.9 |    88494     4753    10088       64     4817  95.1 |  -55.6
CHEM MFG   |    53376    49170       21       21    49191   7.9 |   114605   106156       46        0   106156   7.4 |  115.8
SURF COATG |   210081    55459    46672    46654   102113  60.2 |   404418   120514    92426        0   120514  75.7 |   18.0
FUEL COMB  |     2253     2163      441      441     2604   3.3 |     4086     3918      771      735     4654   4.2 |   78.7
SOLV PURCH |    92524    92524    37792    37792   130316   0.0 |   231499   231499    94557    94557   326056   0.0 |  150.2
MISC       |    42599    11941       66       66    12007  71.9 |    79262    23713       97        0    23713  70.1 |   97.5
-----------------------------------------------------------------------------------------------------------------------------
           |   457023   217481    92194    89592   307073  44.1 |   922363   490553   197984    95356   585909  47.7 |   90.8
```

```
Results of Cost Analysis for Region 26
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:12 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |          Proj Year = 2010            |
ID         |        Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |  105914600.      52550.      2016. |   172407000.      93765.      1839. |    66492420.       62.8
CHEM MFG   |     125146.       4206.        30. |      287018.       8494.        34. |      161872.      129.3
SURF COATG |   34307510.     154640.       222. |    66986790.     376330.       178. |    32679280.       95.3
FUEL COMB  |          0.         90.         0. |           0.        203.         0. |           0.        0.0
SOLV PURCH |          0.          0.         0. |           0.          0.         0. |           0.        0.0
MISC       |    6803634.      30658.       222. |    12343570.      55646.       222. |     5539934.       81.4
--------------------------------------------------------------------------------------------------------------
           |  147150900.     242144.       608. |   252024400.     534439.       472. |   104873500.       71.3
```

```
Results of Emission Projection for Region  27
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:12 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                     |                  Proj Year = 2010                     |
ID          |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
---------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     36087     9381        0         0     9381  74.0 |     64445     8324        0         0     8324  87.1 |   -11.3
CHEM MFG    |       131      131        0         0      131   0.0 |       288      288        0         0      288   0.0 |   120.0
FUEL COMB   |      2632     2632        0         0     2632   0.0 |      3115     3115        0         0     3115   0.0 |    18.4
SOLV PURCH  |      5079     5079        0         0     5079   0.0 |     12511    12511        0         0    12511   0.0 |   146.3
MISC        |      1351     1333        0         0     1333   1.3 |      2275     2247        0         0     2247   1.2 |    68.5
---------------------------------------------------------------------------------------------------------------------------------
            |     45280    18556        0         0    18556  59.0 |     82634    26485        0         0    26485  67.9 |    42.7


Results of Cost Analysis for Region 27
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:12 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980           |           Proj Year = 2010            |
ID          |         Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    61795050.      26706.       2314. |    118194700.      56120.       2106. |     56399620.        91.3
CHEM MFG    |           0.          0.          0. |            0.          0.          0. |            0.         0.0
FUEL COMB   |           0.          0.          0. |            0.          0.          0. |            0.         0.0
SOLV PURCH  |           0.          0.          0. |            0.          0.          0. |            0.         0.0
MISC        |        3996.         18.        222. |         6267.         28.        222. |         2271.        56.8
--------------------------------------------------------------------------------------------------------------------
            |    61799040.      26724.       2312. |    118200900.      56149.       2105. |     56401880.        91.3


Results of Emission Projection for Region  28
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:12 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                     |                  Proj Year = 2010                     |
ID          |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |    %Chg
---------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |       933      933     2387      2330     3263   1.7 |      1247      205     4220         1      206  96.2 |   -93.7
CHEM MFG    |       485      485        0         0      485   0.0 |      1059     1059        0         0     1059   0.0 |   118.5
SURF COATG  |     31591    31561    20235      9792    41353  20.2 |     89031    77783    53683         0    77783  45.5 |    88.1
FUEL COMB   |      2097     2097      481       481     2578   0.0 |      2590     2590      438       438     3028   0.0 |    17.5
SOLV PURCH  |     13924    13924     4892      4892    18816   0.0 |     35065    35065    12320     12320    47385   0.0 |   151.8
MISC        |        64       64       10        10       74   0.0 |       103      103       18        12      115   4.7 |    55.1
---------------------------------------------------------------------------------------------------------------------------------
            |     49094    49064    28005     17505    66569  13.7 |    129096   116806    70678     12771   129577  35.1 |    94.7


Results of Cost Analysis for Region 28
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:12 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980           |           Proj Year = 2010            |
ID          |         Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------------
PETROLEUM   |      132867.         57.       2331. |       285755.       5261.         54. |      152888.       115.1
CHEM MFG    |           0.          0.          0. |            0.          0.          0. |            0.         0.0
SURF COATG  |     1725951.      10473.        165. |     13335780.      64931.        205. |     11609830.       672.7
FUEL COMB   |           0.          0.          0. |            0.          0.          0. |            0.         0.0
SOLV PURCH  |           0.          0.          0. |            0.          0.          0. |            0.         0.0
MISC        |           0.          0.          0. |         1251.          6.        222. |         1251.         0.0
--------------------------------------------------------------------------------------------------------------------
            |     1858818.      10530.        177. |     13622790.      70198.        194. |     11763970.       632.9
```

```
Results of Emission Projection for Region  29
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:12 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                    Base Year = 1980                     |                    Proj Year = 2010                     |
ID         |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |       527       527      3980      1686      2213  50.9 |      1284       479     12045         7       486  96.4 |  -78.0
SURF COATG |      1181      1181         0         0      1181   0.0 |      5225      5225         0         0      5225   0.0 |  342.5
FUEL COMB  |        48        48       181       181       229   0.0 |       120       120       419       419       539   0.0 |  135.3
SOLV PURCH |      1450      1450      1445      1445      2895   0.0 |      5047      5047      5029      5029     10076   0.0 |  248.1
MISC       |         0         0         1         1         1   0.0 |         0         0         2         0         0 100.0 | -100.0
---------------------------------------------------------------------------------------------------------------------------------------
           |      3206      3206      5607      3313      6519  26.0 |     11675     10871     17496      5456     16327  44.0 |  150.4
```

```
Results of Cost Analysis for Region 29
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:13 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------
Ind Cat    |            Base Year = 1980             |            Proj Year = 2010             |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------
PETROLEUM  |    1329053.       2294.        579. |    6367864.      12842.        496. |    5038811.       379.1
SURF COATG |          0.          0.          0. |          0.          0.          0. |          0.         0.0
FUEL COMB  |          0.          0.          0. |          0.          0.          0. |          0.         0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |          0.         0.0
MISC       |          0.          0.          0. |        423.          2.        222. |        423.         0.0
----------------------------------------------------------------------------------------------------------------
           |    1329053.       2294.        579. |    6368287.      12844.        496. |    5039234.       379.2
```

```
Results of Emission Projection for Region  30
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:13 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                    Base Year = 1980                     |                    Proj Year = 2010                     |
ID         |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |  Unc Attn  Ctr Attn    Unc NA    Ctr NA   Tot Ctr   LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |         0         0     59410      3846      3846  93.5 |         0         0    156985         0         0 100.0 | -100.0
CHEM MFG   |         0         0       526       526       526   0.0 |         0         0      1491         0         0 100.0 | -100.0
SURF COATG |         0         0     21951     14618     14618  33.4 |         0         0     75270         0         0 100.0 | -100.0
FUEL COMB  |         0         0       241       241       241   0.0 |         0         0       695       695       695   0.0 |  188.2
SOLV PURCH |         0         0     27436     27436     27436   0.0 |         0         0    105471    105471    105471   0.0 |  284.4
MISC       |         0         0       632       632       632   0.0 |         0         0      1838      1170      1170  36.3 |   85.1
---------------------------------------------------------------------------------------------------------------------------------------
           |         0         0    110196     47299     47299  57.1 |         0         0    341749    107336    107336  68.6 |  126.9
```

```
Results of Cost Analysis for Region 30
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:13 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------
Ind Cat    |            Base Year = 1980             |            Proj Year = 2010             |
ID         |        Cost    Emis Red    Cost Eff |        Cost    Emis Red    Cost Eff |     Abs Chg    Prct Chg
----------------------------------------------------------------------------------------------------------------
PETROLEUM  |  122062900.      55564.       2197. |  689695000.     156985.       4393. |  567632100.       465.0
CHEM MFG   |          0.          0.          0. |     330921.       1491.        222. |     330921.         0.0
SURF COATG |    3768585.       7333.        514. |   32124110.      75270.        427. |   28355520.       752.4
FUEL COMB  |          0.          0.          0. |          0.          0.          0. |          0.         0.0
SOLV PURCH |          0.          0.          0. |          0.          0.          0. |          0.         0.0
MISC       |          0.          0.          0. |     189530.        668.        284. |     189530.         0.0
----------------------------------------------------------------------------------------------------------------
           |  125831500.      62897.       2001. |  722339600.     234413.       3081. |  596508000.       474.1
```

```
Results of Emission Projection for Region  31
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:13 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %    Retire Rate = 5.0   %    Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                  |                 Proj Year = 2010                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr  LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0   408286    48137    48137 88.2 |        0        0   610914       44       44 100.0 |  -99.9
CHEM MFG    |        0        0   147127    21362    21362 85.5 |        0        0   367631        0        0 100.0 | -100.0
SURF COATG  |        0        0    16779     9921     9921 40.9 |        0        0    38531        0        0 100.0 | -100.0
FUEL COMB   |        0        0     8262     8160     8160  1.2 |        0        0    17269    17159    17159   0.6 |  110.3
SOLV PURCH  |        0        0   200270   200270   200270  0.0 |        0        0   510245   510245   510245   0.0 |  154.8
MISC        |        0        0   250278    67189    67189 73.2 |        0        0   432292      384      384  99.9 |  -99.4
------------------------------------------------------------------------------------------------------------------------
            |        0        0  1031002   355039   355039 65.6 |        0        0  1976882   527832   527832  73.3 |   48.7
```

```
Results of Cost Analysis for Region 31
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:13 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %    Retire Rate = 5.0   %    Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980            |          Proj Year = 2010            |
ID          |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |       Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------
PETROLEUM   |   456773800.     360149.      1268. |  1519261000.     610869.      2487. |  1062488000.       232.6
CHEM MFG    |     1302154.     125765.        10. |    17120530.     367631.        47. |    15818380.      1214.8
SURF COATG  |     1572060.       6858.       229. |     8432791.      38531.       219. |     6860731.       436.4
FUEL COMB   |           0.        102.         0. |           0.        110.         0. |           0.         0.0
SOLV PURCH  |           0.          0.         0. |           0.          0.         0. |           0.         0.0
MISC        |    82684060.     183089.       452. |   184724900.     431908.       428. |   102040800.       123.4
------------------------------------------------------------------------------------------------------
            |   542332000.     675963.       802. |  1729539000.    1449050.      1194. |  1187207000.       218.9
```

```
Results of Emission Projection for Region  32
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:13 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %    Retire Rate = 5.0   %    Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                  |                 Proj Year = 2010                   |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr  LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     9147     5195    23790    23790    28985 12.0 |    15709     1777    63631       14     1790  97.7 |  -93.8
SURF COATG  |      350        7        0        0        7 98.0 |      908       18        0        0       18  98.0 |  159.4
FUEL COMB   |    22641    22641       47       47    22688  0.0 |    32508    32508      127      127    32635   0.0 |   43.8
SOLV PURCH  |     4603     4603     3921     3921     8524  0.0 |    15855    15855    13505    13505    29360   0.0 |  244.4
MISC        |      677      677        5        5      682  0.0 |     1923     1923       11        0     1923   0.6 |  182.0
------------------------------------------------------------------------------------------------------------------------
            |    37418    33123    27763    27763    60886  6.6 |    66902    52080    77275    13646    65726  54.4 |    7.9
```

```
Results of Cost Analysis for Region 32
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:13 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %    Retire Rate = 5.0   %    Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980            |          Proj Year = 2010            |
ID          |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |       Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------
PETROLEUM   |     9212112.       3952.      2331. |    13633310.      77549.       176. |     4421199.        48.0
SURF COATG  |     1346961.        343.      3927. |     3493770.        890.      3927. |     2146809.       159.4
FUEL COMB   |           0.          0.         0. |           0.          0.         0. |           0.         0.0
SOLV PURCH  |           0.          0.         0. |           0.          0.         0. |           0.         0.0
MISC        |           0.          0.         0. |         324.         11.        30. |         324.         0.0
------------------------------------------------------------------------------------------------------
            |    10559070.       4295.      2458. |    17127410.      78450.       218. |     6568333.        62.2
```

```
Results of Emission Projection for Region  33
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:14 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                    |                  Proj Year = 2010                    |
ID         |  Unc Attn  Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn  Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
----------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      1391      1279    24591    24591    25870   0.4 |      1822      1109    26848     1371     2480  91.3 |   -90.4
CHEM MFG   |       517       517     1151     1151     1668   0.0 |      1838       583     2930        0      583  87.8 |   -65.0
SURF COATG |     15328     15328    26867    26867    42195   0.0 |     32570     31717    57102        0    31717  64.6 |   -24.8
FUEL COMB  |      2564      2564     4055     4055     6619   0.0 |      4607      4607     7698     7698    12305   0.0 |    85.9
SOLV PURCH |    126654    126654   225162   225162   351816   0.0 |    308097    308097   547727   547727   855824   0.0 |   143.3
MISC       |     32254     32254    35868    35404    67658   0.7 |     53406     52944    65532    33576    86520  27.3 |    27.9
----------------------------------------------------------------------------------------------------------------------------------
           |    178708    178596   317694   317230   495826   0.1 |    402340    399058   707836   590372   989430  10.9 |    99.6
```

```
Results of Cost Analysis for Region 33
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:14 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |          Proj Year = 2010             |
ID         |        Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      -2688.        112.          0. |     43050930.      26190.       1644. |     43053620.         0.0
CHEM MFG   |          0.          0.          0. |      1559160.       4184.        373. |      1559160.         0.0
SURF COATG |          0.          0.          0. |     12695260.      57956.        219. |     12695260.         0.0
FUEL COMB  |          0.          0.          0. |            0.          0.          0. |            0.         0.0
SOLV PURCH |          0.          0.          0. |            0.          0.          0. |            0.         0.0
MISC       |     225504.        464.        486. |     15695940.      32417.        484. |     15470430.      6860.4
--------------------------------------------------------------------------------------------------------------------
           |     222816.        576.        387. |     73001280.     120746.        605. |     72778460.     32663.0
```

```
Results of Emission Projection for Region  34
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:14 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                    |                  Proj Year = 2010                    |
ID         |  Unc Attn  Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn  Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
----------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |     36054      7996     5480     2098    10094  75.7 |     75822      9118    13435        5     9124  89.8 |    -9.6
CHEM MFG   |   1091207     39849     2283     2283    42132  96.1 |   2840624    106695     5929        0   106695  96.3 |   153.2
SURF COATG |     40170     38793      819      819    39612   3.4 |    128787     73196     2240        0    73196  44.1 |    84.8
FUEL COMB  |      8050      8050      247      247     8297   0.0 |     14700     14700      330      330    15030   0.0 |    81.1
SOLV PURCH |    128112    128112     6743     6743   134855   0.0 |    339079    339079    17847    17847   356926   0.0 |   164.7
MISC       |     59673     12454        0        0    12454  79.1 |    110273     19925        0        0    19925  81.9 |    60.0
----------------------------------------------------------------------------------------------------------------------------------
           |   1363266    235254    15572    12190   247444  82.1 |   3509284    562712    39780    18182   580894  83.6 |   134.8
```

```
Results of Cost Analysis for Region 34
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:14 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |          Proj Year = 2010             |
ID         |        Cost    Emis Red    Cost Eff |          Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   30330310.      31440.        965. |    135743200.      80133.       1694. |    105412900.       347.5
CHEM MFG   |  -11556510.    1051358.          0. |    -25884700.    2739859.          0. |    -14328180.         0.0
SURF COATG |     312579.       1377.        227. |      9059026.      57831.        157. |      8746447.      2798.2
FUEL COMB  |          0.          0.          0. |            0.          0.          0. |            0.         0.0
SOLV PURCH |          0.          0.          0. |            0.          0.          0. |            0.         0.0
MISC       |   21567230.      47219.        457. |     41919880.      90348.        464. |     20352650.        94.4
--------------------------------------------------------------------------------------------------------------------
           |   40653620.    1131394.         36. |    160837400.    2968171.         54. |    120183800.       295.6
```

```
Results of Emission Projection for Region  35
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:14 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                 |                  Proj Year = 2010                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1340     1340        0        0     1340   0.0 |     1384      814        0        0      814  41.2 |   -39.3
FUEL COMB   |      601      601        0        0      601   0.0 |     1044     1044        0        0     1044   0.0 |    73.7
SOLV PURCH  |     4186     4186        0        0     4186   0.0 |    11465    11465        0        0    11465   0.0 |   173.9
------------------------------------------------------------------------------------------------------------------------
            |     6127     6127        0        0     6127   0.0 |    13893    13323        0        0    13323   4.1 |   117.4
```

```
Results of Cost Analysis for Region 35
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:14 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980           |           Proj Year = 2010           |
ID          |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |           0.          0.          0. |      683740.        570.       1199. |       683740.         0.0
FUEL COMB   |           0.          0.          0. |           0.          0.          0. |            0.         0.0
SOLV PURCH  |           0.          0.          0. |           0.          0.          0. |            0.         0.0
-------------------------------------------------------------------------------------------------------------
            |           0.          0.          0. |      683740.        570.       1199. |       683740.         0.0
```

```
Results of Emission Projection for Region  36
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:15 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                 |                  Proj Year = 2010                 |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    93995    20404    20404  78.3 |        0        0   118730      315      315  99.7 |   -98.5
CHEM MFG    |        0        0    91620    23471    23471  74.4 |        0        0   193888        0        0 100.0 |  -100.0
SURF COATG  |        0        0   175053    93074    93074  46.8 |        0        0   363560        0        0 100.0 |  -100.0
FUEL COMB   |        0        0    25278    25278    25278   0.0 |        0        0    27632    27632    27632   0.0 |     9.3
SOLV PURCH  |        0        0   334152   334152   334152   0.0 |        0        0   785785   785785   785785   0.0 |   135.2
MISC        |        0        0    49990    21382    21382  57.2 |        0        0    74001     8620     8620  88.4 |   -59.7
------------------------------------------------------------------------------------------------------------------------
            |        0        0   770088   517761   517761  32.8 |        0        0  1563596   822352   822352  47.4 |    58.8
```

```
Results of Cost Analysis for Region 36
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:15 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980           |           Proj Year = 2010           |
ID          |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |       Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |    24973600.      73591.        339. |    95780060.     118415.        809. |     70806450.       283.5
CHEM MFG    |     3310755.      68149.         49. |    10888430.     193888.         56. |      7577674.       228.9
SURF COATG  |    15385890.      81979.        188. |    86055770.     363560.        237. |     70669880.       459.3
FUEL COMB   |           0.          0.          0. |           0.          0.          0. |            0.         0.0
SOLV PURCH  |           0.          0.          0. |           0.          0.          0. |            0.         0.0
MISC        |     6288756.      28608.        220. |    13766830.      65381.        211. |      7478077.       118.9
-------------------------------------------------------------------------------------------------------------
            |    49959010.     252327.        198. |   206491100.     741244.        279. |    156532100.       313.3
```

```
Results of Emission Projection for Region  37
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:15 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                 |                  Proj Year = 2010                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    58888    48710   650426     5503    54213  92.4 |    77948    20554   775825       20    20574  97.6 |  -62.0
CHEM MFG   |     6106     4648     1619     1619     6267  18.9 |    13253    10148     3420        0    10148  39.1 |   61.9
SURF COATG |   663776     1430     9173     4189     5619  99.2 |  1716805    13637    23537        0    13637  99.2 |  142.7
FUEL COMB  |    35147    35147     9836     9836    44983   0.0 |    38820    38820    12090    12090    50910   0.0 |   13.2
SOLV PURCH |    34992    34992     8288     8288    43280   0.0 |   116617   116617    27621    27621   144238   0.0 |  233.3
MISC       |     2178     2178     1994      905     3083  26.1 |     4167     4167     4121        0     4167  49.7 |   35.2
-------------------------------------------------------------------------------------------------------------------------------
           |   801087   127105   681336    30340   157445  89.4 |  1967609   203942   846615    39732   243674  91.3 |   54.8


Results of Cost Analysis for Region 37
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:15 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980        |          Proj Year = 2010        |
ID         |        Cost   Emis Red  Cost Eff |        Cost   Emis Red  Cost Eff |     Abs Chg  Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |   56565800.    655101.       86. |  177659700.    833199.      213. |  121093900.     214.1
CHEM MFG   |    1331154.      1458.      913. |    5235887.      6525.      802. |    3904733.     293.3
SURF COATG |  118799200.    667330.      178. |  323419800.   1726705.      187. |  204620600.     172.2
FUEL COMB  |          0.         0.        0. |          0.         0.        0. |          0.       0.0
SOLV PURCH |          0.         0.        0. |          0.         0.        0. |          0.       0.0
MISC       |     241758.      1089.      222. |     640353.      4121.      155. |     398595.     164.9
--------------------------------------------------------------------------------------------------------------
           |  176937900.   1324978.      134. |  506955700.   2570551.      197. |  330017900.     186.5


Results of Emission Projection for Region  38
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:15 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                 |                  Proj Year = 2010                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   122071     6323      400       20     6343  94.8 |   275636    13811      904        0    13811  95.0 |  117.7
CHEM MFG   |    13331    13331     1112     1112    14443   0.0 |    30310    30310     1437        0    30310   4.5 |  109.9
SURF COATG |     3434     3434     4735     4735     8169   0.0 |     9013     7044    14846        0     7044  70.5 |  -13.8
FUEL COMB  |     7051     7051     2271     2271     9322   0.0 |    11277    11277     3783     3783    15060   0.0 |   61.6
SOLV PURCH |    34141    34141     8537     8537    42678   0.0 |    91566    91566    22896    22896   114462   0.0 |  168.2
MISC       |     3658     3658      536      536     4194   0.0 |     7081     7081      876      146     7226   9.2 |   72.3
-------------------------------------------------------------------------------------------------------------------------------
           |   183686    67938    17591    17211    85149  57.7 |   424882   161088    44742    26825   187913  60.0 |  120.7


Results of Cost Analysis for Region 38
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:15 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980        |          Proj Year = 2010        |
ID         |        Cost   Emis Red  Cost Eff |        Cost   Emis Red  Cost Eff |     Abs Chg  Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |  270694400.    116128.     2331. |  611764900.    262729.     2329. |  341070600.     126.0
CHEM MFG   |          0.         0.        0. |     -20051.      1437.        0. |     -20051.       0.0
SURF COATG |          0.         0.        0. |    2909763.     16815.      173. |    2909763.       0.0
FUEL COMB  |          0.         0.        0. |          0.         0.        0. |          0.       0.0
SOLV PURCH |          0.         0.        0. |          0.         0.        0. |          0.       0.0
MISC       |          0.         0.        0. |     162235.       731.      222. |     162235.       0.0
--------------------------------------------------------------------------------------------------------------
           |  270694400.    116128.     2331. |  614816900.    281711.     2182. |  344122500.     127.1
```

```
Results of Emission Projection for Region  39
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:16 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                Base Year = 1980                  |                Proj Year = 2010                  |
ID         |  Unc Attn Ctr Attn  Unc NA  Ctr NA Tot Ctr   LOC |  Unc Attn Ctr Attn  Unc NA  Ctr NA Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |         0        0  231232   49846   49846  78.4 |         0        0  316302     621     621  99.8 |  -98.8
CHEM MFG   |         0        0   99770   16879   16879  83.1 |         0        0  214641       0       0 100.0 | -100.0
SURF COATG |         0        0  223368  126026  126026  43.6 |         0        0  452893       0       0 100.0 | -100.0
FUEL COMB  |         0        0   14866   14746   14746   0.8 |         0        0   14087   13865   13865   1.6 |   -6.0
SOLV PURCH |         0        0  295168  295168  295168   0.0 |         0        0  658051  658051  658051   0.0 |  122.9
MISC       |         0        0   61365   43464   43464  29.2 |         0        0  113072   16616   16616  85.3 |  -61.8
-------------------------------------------------------------------------------------------------------------------------
           |         0        0  925769  546129  546129  41.0 |         0        0 1769045  689154  689154  61.0 |   26.2


Results of Cost Analysis for Region 39
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:16 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |         Base Year = 1980          |          Proj Year = 2010          |
ID         |        Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |  279040000.    181386.      1538. |   810662000.    315680.      2568. |   531622000.      190.5
CHEM MFG   |     190628.     82891.         2. |    39149510.    214641.       182. |    38958880.    20437.1
SURF COATG |   26654080.     97342.       274. |   137991500.    452893.       305. |   111337400.      417.7
FUEL COMB  |          0.       120.         0. |           0.       222.         0. |           0.        0.0
SOLV PURCH |          0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC       |    3843936.     17901.       215. |    21129850.     96456.       219. |    17285910.      449.7
-------------------------------------------------------------------------------------------------------------
           |  309728600.    379640.       816. |  1008933000.   1079891.       934. |   699204200.      225.7


Results of Emission Projection for Region  41
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:16 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                Base Year = 1980                  |                Proj Year = 2010                  |
ID         |  Unc Attn Ctr Attn  Unc NA  Ctr NA Tot Ctr   LOC |  Unc Attn Ctr Attn  Unc NA  Ctr NA Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |         0        0    3265    3037    3037   7.0 |         0        0    6441      17      17  99.7 |  -99.4
CHEM MFG   |         0        0    8059     497     497  93.8 |         0        0    7405       0       0 100.0 | -100.0
SURF COATG |         0        0   11578    8978    8978  22.5 |         0        0   18993       0       0 100.0 | -100.0
FUEL COMB  |         0        0     149     149     149   0.0 |         0        0     240     240     240   0.0 |   60.9
SOLV PURCH |         0        0   37388   37388   37388   0.0 |         0        0   81027   81027   81027   0.0 |  116.7
MISC       |         0        0     597     119     119  80.1 |         0        0     857       0       0 100.0 | -100.0
-------------------------------------------------------------------------------------------------------------------------
           |         0        0   61036   50168   50168  17.8 |         0        0  114962   81284   81284  29.3 |   62.0


Results of Cost Analysis for Region 41
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:16 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |         Base Year = 1980          |          Proj Year = 2010          |
ID         |        Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |     531468.       228.      2331. |     4099760.      6423.       638. |     3568292.      671.4
CHEM MFG   |    -113430.      7562.         0. |      -70347.      7405.         0. |       43083.        0.0
SURF COATG |     512732.      2600.       197. |     7163375.     18993.       377. |     6650643.     1297.1
FUEL COMB  |          0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH |          0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC       |      41108.       478.        86. |      102073.       857.       119. |       60965.      148.3
-------------------------------------------------------------------------------------------------------------
           |     971878.     10868.        89. |    11294860.     33679.       335. |    10322980.     1062.2
```

```
Results of Emission Projection for Region  42
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:17 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0  %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |               Base Year = 1980                     |              Proj Year = 2010                      |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0    58275     8087     8087  86.1 |        0        0   106892      120      120  99.9 |  -98.5
CHEM MFG    |        0        0    95982    33475    33475  65.1 |        0        0   249723        0        0 100.0 | -100.0
SURF COATG  |        0        0   196094   160290   160290  18.3 |        0        0   529375        0        0 100.0 | -100.0
FUEL COMB   |        0        0     4684     4684     4684   0.0 |        0        0     7599     7599     7599   0.0 |   62.2
SOLV PURCH  |        0        0    70020    70020    70020   0.0 |        0        0   177462   177462   177462   0.0 |  153.4
MISC        |        0        0    27592    20581    20581  25.4 |        0        0    48479     4136     4136  91.5 |  -79.9
-----------------------------------------------------------------------------------------------------------------------------
            |        0        0   452647   297137   297137  34.4 |        0        0  1119530   189317   189317  83.1 |  -36.3
```

```
Results of Cost Analysis for Region 42
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:17 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0  %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |       Base Year = 1980             |        Proj Year = 2010              |
ID          |       Cost     Emis Red   Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg     Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   |   21976620.     50188.        438. |    57681010.    106772.        540. |    35704380.       162.5
CHEM MFG    |   -1789561.     62507.          0. |      817594.    249723.          3. |     2607155.         0.0
SURF COATG  |   11232350.     35804.        314. |   187315500.    529375.        354. |   176083100.      1567.6
FUEL COMB   |         0.         0.          0. |           0.         0.          0. |           0.         0.0
SOLV PURCH  |         0.         0.          0. |           0.         0.          0. |           0.         0.0
MISC        |     602946.      7011.         86. |     4360618.     44343.         98. |     3757672.       623.2
-----------------------------------------------------------------------------------------------------------------
            |   32022360.    155510.        206. |   250174700.    930212.        269. |   218152300.       681.3
```

```
Results of Emission Projection for Region  43
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:17 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0  %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |               Base Year = 1980                     |              Proj Year = 2010                      |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |     1672     1672        0        0     1672   0.0 |     2765      378        0        0      378  86.3 |  -77.4
FUEL COMB   |      194      194        0        0      194   0.0 |      355      355        0        0      355   0.0 |   83.1
SOLV PURCH  |     6538     6538        0        0     6538   0.0 |    18848    18848        0        0    18848   0.0 |  188.3
MISC        |     1162     1162        0        0     1162   0.0 |     1942     1942        0        0     1942   0.0 |   67.1
-----------------------------------------------------------------------------------------------------------------------------
            |     9566     9566        0        0     9566   0.0 |    23909    21522        0        0    21522  10.0 |  125.0
```

```
Results of Cost Analysis for Region 43
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:17 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0  %     Retire Rate = 5.0  %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |       Base Year = 1980             |        Proj Year = 2010              |
ID          |       Cost     Emis Red   Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg     Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   |         0.         0.          0. |     -372790.      2387.          0. |     -372790.         0.0
FUEL COMB   |         0.         0.          0. |           0.         0.          0. |           0.         0.0
SOLV PURCH  |         0.         0.          0. |           0.         0.          0. |           0.         0.0
MISC        |         0.         0.          0. |           0.         0.          0. |           0.         0.0
-----------------------------------------------------------------------------------------------------------------
            |         0.         0.          0. |     -372790.      2387.          0. |     -372790.         0.0
```

```
Results of Emission Projection for Region  44
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:17 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                 |                 Proj Year = 2010                 |
ID         |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |         0        0    18214     8070     8070  55.7 |         0        0    35164       39       39  99.9 |  -99.5
CHEM MFG   |         0        0   864272    60147    60147  93.0 |         0        0  1950260        0        0 100.0 | -100.0
SURF COATG |         0        0   100250    60459    60459  39.7 |         0        0   239869        0        0 100.0 | -100.0
FUEL COMB  |         0        0    17364    17364    17364   0.0 |         0        0    30713    30713    30713   0.0 |   76.9
SOLV PURCH |         0        0    87525    87525    87525   0.0 |         0        0   226894   226894   226894   0.0 |  159.2
MISC       |         0        0    85849    11801    11801  86.3 |         0        0   195609     3808     3808  98.1 |  -67.7
-------------------------------------------------------------------------------------------------------------------------------
           |         0        0  1173474   245366   245366  79.1 |         0        0  2678510   261454   261454  90.2 |    6.6
```

```
Results of Cost Analysis for Region 44
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:17 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |          Proj Year = 2010           |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |    23363040.     10144.      2303. |    98469570.     35126.      2803. |    75106530.      321.5
CHEM MFG   |    17911160.    804125.        22. |    48058130.   1950260.        25. |    30146980.      168.3
SURF COATG |    22261760.     39791.       559. |   111494600.    239869.       465. |    89232810.      400.8
FUEL COMB  |           0.         0.         0. |           0.         0.         0. |           0.        0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC       |     6529968.     74048.        88. |    19533560.    191801.       102. |    13003590.      199.1
--------------------------------------------------------------------------------------------------------------
           |    70065930.    928108.        75. |   277555800.   2417056.       115. |   207489900.      296.1
```

```
Results of Emission Projection for Region  45
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:18 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                 |                 Proj Year = 2010                 |
ID         |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |    938580   158438  1948311   151939   310377  89.2 |   1292826    87029  2695894      638    87667  97.8 |  -71.8
CHEM MFG   |   6636224   216664  2744492   119028   335692  96.4 |  17304366   552396  7338214        0   552396  97.8 |   64.6
SURF COATG |     87575    85202    30085    29745   114947   2.3 |    223146   214017    76531        0   214017  28.6 |   86.2
FUEL COMB  |    360485   320582   153735   153636   474218   7.8 |    393338   316120   146057   136165   452285  16.1 |   -4.6
SOLV PURCH |    146774   146774    75611    75611   222385   0.0 |    402193   402193   207191   207191   609384   0.0 |  174.0
MISC       |    126954   120659    10659     7652   128311   6.8 |    351059   332040    25500     4329   336369  10.7 |  162.2
-------------------------------------------------------------------------------------------------------------------------------
           |   8296592  1048319  4962893   537611  1585930  88.0 |  19966928  1903796 10489387   348324  2252120  92.6 |   42.0
```

```
Results of Cost Analysis for Region 45
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:18 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |          Proj Year = 2010           |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |   922628700.   2576514.       358. |  3250418000.   3901053.       833. |  2327790000.      252.3
CHEM MFG   |  4227248000.   9045024.       467. | 10910750000.  24090180.       453. |  6683503000.      158.1
SURF COATG |     2824090.      2713.      1041. |    31563760.     85659.       368. |    28739670.     1017.7
FUEL COMB  |           0.     40002.         0. |           0.     87109.         0. |           0.        0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |           0.        0.0
MISC       |     2387352.      9302.       257. |    12353350.     40190.       307. |     9966002.      417.5
--------------------------------------------------------------------------------------------------------------
           |  5155088000.  11673560.       442. | 14205090000.  28204200.       504. |  9049998000.      175.6
```

```
Results of Emission Projection for Region  46
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:18 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                    Proj Year = 2010                    |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    13374     9026        6         6     9032  32.5 |    18423     4151        8         0     4151  77.5 |  -54.0
CHEM MFG    |      246      246        0         0      246   0.0 |      617      617        0         0      617   0.0 |  151.0
SURF COATG  |      170      170        0         0      170   0.0 |      590      590        0         0      590   0.0 |  247.1
FUEL COMB   |     6146     6146      818       323     6469   7.1 |     7441     7249     1919       838     8087  13.6 |   25.0
SOLV PURCH  |    17210    17210      351       351    17561   0.0 |    59376    59376     1211      1211    60587   0.0 |  245.0
MISC        |      370      370        2         2      372   0.0 |      971      971        4         0      971   0.4 |  161.0
--------------------------------------------------------------------------------------------------------------------------------
            |    37516    33168     1177       682    33850  12.5 |    87418    72954     3142      2049    75003  17.2 |  121.6
```

```
Results of Cost Analysis for Region 46
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:18 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 2010           |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |    9214092.      4348.      2119. |   16284880.     14279.      1140. |     7070785.        76.7
CHEM MFG    |          0.         0.         0. |          0.         0.         0. |          0.         0.0
SURF COATG  |          0.         0.         0. |          0.         0.         0. |          0.         0.0
FUEL COMB   |          0.       495.         0. |          0.      1274.         0. |          0.         0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |          0.         0.0
MISC        |          0.         0.         0. |        884.         4.       222. |        884.         0.0
-------------------------------------------------------------------------------------------------------------
            |    9214092.      4843.      1903. |   16285760.     15557.      1047. |     7071669.        76.7
```

```
Results of Emission Projection for Region  47
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:18 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                    Proj Year = 2010                    |
ID          | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA    Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |        0        0      536       384      384  28.4 |        0        0     1173         0        0 100.0 | -100.0
CHEM MFG    |        3        3       15        15       18   0.0 |        7        7       58         0        7  88.8 |  -59.6
SURF COATG  |     1697     1663     1154      1069     2732   4.2 |     3496     3157     2389         0     3157  46.4 |   15.5
FUEL COMB   |       61       61       67        67      128   0.0 |      140      140      135       135      275   0.0 |  114.6
SOLV PURCH  |     4094     4094     4094      4094     8188   0.0 |    14952    14952    14952     14952    29903   0.0 |  265.2
MISC        |      324      324      398       398      722   0.0 |      569      569      785       785     1354   0.0 |   87.5
--------------------------------------------------------------------------------------------------------------------------------
            |     6179     6145     6264      6027    12172   2.2 |    19163    18824    19491     15872    34696  10.2 |  185.0
```

```
Results of Cost Analysis for Region 47
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:18 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980          |          Proj Year = 2010           |
ID          |        Cost   Emis Red   Cost Eff |        Cost   Emis Red   Cost Eff |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM   |     354312.       152.      2331. |    1812969.      1173.      1546. |     1458657.       411.7
CHEM MFG    |          0.         0.         0. |        289.        58.         5. |        289.         0.0
SURF COATG  |     129710.       119.      1090. |    1226685.      2728.       450. |     1096975.       845.7
FUEL COMB   |          0.         0.         0. |          0.         0.         0. |          0.         0.0
SOLV PURCH  |          0.         0.         0. |          0.         0.         0. |          0.         0.0
MISC        |          0.         0.         0. |          0.         0.         0. |          0.         0.0
-------------------------------------------------------------------------------------------------------------
            |     484022.       271.      1786. |    3039943.      3959.       768. |     2555921.       528.1
```

```
Results of Emission Projection for Region  48
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:19 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                  Proj Year = 2010                     |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   115631     8798     5704     1960    10758  91.1 |   154106     6927    13988        1     6928  95.9 |  -35.6
CHEM MFG    |   426513    29475     1973     1973    31448  92.7 |   667059    56142     5005        0    56142  91.6 |   78.5
SURF COATG  |    39019    32945     3054     3054    35999  14.4 |   101192    67669     8037        0    67669  38.0 |   88.0
FUEL COMB   |     4710     4710      511      511     5221   0.0 |     6181     6181      636      636     6816   0.0 |   30.6
SOLV PURCH  |    72563    72563     8063     8063    80626   0.0 |   188762   188762    20975    20975   209737   0.0 |  160.1
MISC        |    20920    18953     2977     2977    21930   8.2 |    48235    42644     6296       22    42666  21.8 |   94.6
-------------------------------------------------------------------------------------------------------------------------------
            |   679356   167444    22282    18538   185982  73.5 |  1165536   368325    54937    21634   389959  68.0 |  109.7
```

```
Results of Cost Analysis for Region 48
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:19 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980             |        Proj Year = 2010             |
ID          |       Cost    Emis Red    Cost Eff |       Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------
PETROLEUM   |  17607490.    110577.        159. |  86003220.    161166.        534. |   68395730.       388.4
CHEM MFG    |  -5517937.    397038.          0. |  -6260817.    615922.          0. |    -742880.         0.0
SURF COATG  |   1217473.      6074.        200. |  10977220.     41560.        264. |    9759745.       801.6
FUEL COMB   |         0.         0.          0. |         0.         0.          0. |          0.         0.0
SOLV PURCH  |         0.         0.          0. |         0.         0.          0. |          0.         0.0
MISC        |    434838.      1967.        221. |   4138389.     11866.        349. |    3703551.       851.7
-----------------------------------------------------------------------------------------------------
            |  13741870.    515656.         27. |  94858010.    830514.        114. |   81116140.       590.3
```

```
Results of Emission Projection for Region  49
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:19 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                  Proj Year = 2010                     |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   141490    11641     8954     8596    20237  86.5 |   295426     9644    17454      292     9936  96.8 |  -50.9
CHEM MFG    |    98597      509      398      349      858  99.1 |   351268     1822     1131        0     1822  99.5 |  112.4
SURF COATG  |      642      642     3349     3327     3969   0.6 |     1446     1340     7472        0     1340  85.0 |  -66.2
FUEL COMB   |     4983     4983     5221     4495     9478   7.1 |     8555     7888     9494     8663    16551   8.3 |   74.6
SOLV PURCH  |    30571    30571    23063    23063    53634   0.0 |    82971    82971    62594    62594   145564   0.0 |  171.4
MISC        |    15336    11276     4716     4383    15659  21.9 |    28877    23056    10346      894    23950  38.9 |   52.9
-------------------------------------------------------------------------------------------------------------------------------
            |   291619    59622    45701    44213   103835  69.2 |   768544   126720   108491    72443   199163  77.3 |   91.8
```

```
Results of Cost Analysis for Region 49
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:19 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------
Ind Cat     |        Base Year = 1980             |        Proj Year = 2010             |
ID          |       Cost    Emis Red    Cost Eff |       Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------
PETROLEUM   |   -717160.    130207.          0. |   2545571.    302944.          8. |    3262731.         0.0
CHEM MFG    |  -1457061.     98137.          0. |  -4636663.    350577.          0. |   -3179602.         0.0
SURF COATG  |      4994.        22.        227. |   1790187.      7579.        236. |    1785193.     35746.8
FUEL COMB   |         0.       726.          0. |         0.      1498.          0. |          0.         0.0
SOLV PURCH  |         0.         0.          0. |         0.         0.          0. |          0.         0.0
MISC        |    975246.      4393.        222. |   3487690.     15274.        228. |    2512444.       257.6
-----------------------------------------------------------------------------------------------------
            |  -1193981.    233485.          0. |   3186785.    677872.          5. |    4380766.         0.0
```

```
Results of Emission Projection for Region  50
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:19 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                   |                  Proj Year = 2010                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |      112      112        0        0      112    0.0 |      139       31        0        0       31   77.3 |  -71.9
CHEM MFG   |    99269      556        0        0      556   99.4 |   246729     1309        0        0     1309   99.5 |  135.4
FUEL COMB  |    10152    10152        0        0    10152    0.0 |     9367     9367        0        0     9367    0.0 |   -7.7
SOLV PURCH |    21768    21768        0        0    21768    0.0 |    49708    49708        0        0    49708    0.0 |  128.4
MISC       |    10786    10786        0        0    10786    0.0 |    18686     5984        0        0     5984   68.0 |  -44.5
------------------------------------------------------------------------------------------------------------------------------
           |   142087    43374        0        0    43374   69.5 |   324628    66399        0        0    66399   79.5 |   53.1


Results of Cost Analysis for Region 50
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:19 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |           Proj Year = 2010           |
ID         |        Cost    Emis Red    Cost Eff  |        Cost    Emis Red    Cost Eff  |     Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |          0.          0.          0.  |      23764.        107.        222.  |      23764.         0.0
CHEM MFG   |    7277019.      98713.         74.  |   19160640.     245420.         78.  |   11883620.       163.3
FUEL COMB  |          0.          0.          0.  |          0.          0.          0.  |          0.         0.0
SOLV PURCH |          0.          0.          0.  |          0.          0.          0.  |          0.         0.0
MISC       |          0.          0.          0.  |    2819742.      12702.        222.  |    2819742.         0.0
--------------------------------------------------------------------------------------------------------------
           |    7277019.      98713.         74.  |   22004140.     258229.         85.  |   14727120.       202.4


Results of Emission Projection for Region  51
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:20 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                   |                  Proj Year = 2010                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |        0        0    20474    12043    12043   41.2 |        0        0    35116      139      139   99.6 |  -98.8
CHEM MFG   |        0        0    10221     8659     8659   15.3 |        0        0    24963        0        0  100.0 | -100.0
SURF COATG |        0        0    68649    44623    44623   35.0 |        0        0   134311        0        0  100.0 | -100.0
FUEL COMB  |        0        0     4906     4906     4906    0.0 |        0        0     7716     7716     7716    0.0 |   57.3
SOLV PURCH |        0        0   115263   115263   115263    0.0 |        0        0   275834   275834   275834    0.0 |  139.3
MISC       |        0        0    14851     6931     6931   53.3 |        0        0    34790     8306     8306   76.1 |   19.8
------------------------------------------------------------------------------------------------------------------------------
           |        0        0   234364   192425   192425   17.9 |        0        0   512730   291996   291996   43.1 |   51.7


Results of Cost Analysis for Region 51
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:20 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980            |           Proj Year = 2010           |
ID         |        Cost    Emis Red    Cost Eff  |        Cost    Emis Red    Cost Eff  |     Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |   18521100.       8431.       2197.  |   78211340.      34976.       2236.  |   59690240.       322.3
CHEM MFG   |     102568.       1562.         66.  |    3463603.      24963.        139.  |    3361035.      3276.9
SURF COATG |    7347002.      24026.        306.  |   48269040.     134311.        359.  |   40922030.       557.0
FUEL COMB  |          0.          0.          0.  |          0.          0.          0.  |          0.         0.0
SOLV PURCH |          0.          0.          0.  |          0.          0.          0.  |          0.         0.0
MISC       |      87912.       7920.         11.  |    1150446.      26484.         43.  |    1062534.      1208.6
--------------------------------------------------------------------------------------------------------------
           |   26058580.      41939.        621.  |  131094400.     220734.        594.  |  105035800.       403.1
```

```
Results of Emission Projection for Region  52
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:20 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 2010                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |    18750    16983        0        0    16983   9.4 |    17766     5124        0        0     5124  71.2 |  -69.8
CHEM MFG    |       10        0        0        0        0 100.0 |       16        0        0        0        0 100.0 |    0.0
FUEL COMB   |    12318    12318        0        0    12318   0.0 |    11035    11035        0        0    11035   0.0 |  -10.4
SOLV PURCH  |     1102     1102        0        0     1102   0.0 |     2740     2740        0        0     2740   0.0 |  148.6
MISC        |     1552     1552        0        0     1552   0.0 |     2813     2592        0        0     2592   7.9 |   67.0
--------------------------------------------------------------------------------------------------------------------------------
            |    33732    31955        0        0    31955   5.3 |    34369    21491        0        0    21491  37.5 |  -32.7


Results of Cost Analysis for Region 52
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:20 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980             |             Proj Year = 2010          |
ID          |         Cost    Emis Red     Cost Eff |         Cost    Emis Red     Cost Eff |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   |     2483699.       1767.        1406. |     4527293.      12642.         358. |     2043594.        82.3
CHEM MFG    |        -150.         10.           0. |        -235.         16.           0. |         -85.         0.0
FUEL COMB   |           0.          0.           0. |           0.          0.           0. |           0.         0.0
SOLV PURCH  |           0.          0.           0. |           0.          0.           0. |           0.         0.0
MISC        |           0.          0.           0. |       49054.        221.         222. |       49054.         0.0
-----------------------------------------------------------------------------------------------------------------
            |     2483549.       1777.        1398. |     4576112.      12879.         355. |     2092563.        84.3


Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:20 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 2010                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826   850400  1269531  84.6 |  3589190   252244  9339191     9162   261406  98.0 |  -79.4
CHEM MFG    |  9029663   422308  6814311   668432  1090740  93.1 | 22835586  1027572 18002932        0  1027572  97.5 |   -5.8
SURF COATG  |  1408711   394641  1728687  1210559  1605200  48.8 |  3431962   868443  4070568        0   868443  88.4 |  -45.9
FUEL COMB   |   649795   607706   442590   433741  1041447   4.7 |   754943   671812   564419   538962  1210774   8.2 |   16.3
SOLV PURCH  |  1355797  1355797  3240896  3240896  4596693   0.0 |  3628086  3628086  8451993  8451993 12080079   0.0 |  162.8
MISC        |   439043   281284   993342   342087   623371  56.5 |   951502   599365  1896249   164032   763396  73.2 |   22.5
--------------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652  6746115 10226982  70.2 | 35191268  7047522 42325352  9164149 16211672  79.1 |   58.5


Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  3:20 AM, Wednesday August 26, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980             |             Proj Year = 2010          |
ID          |         Cost    Emis Red     Cost Eff |         Cost    Emis Red     Cost Eff |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM   |  6192942000.    6988221.         886. | 22555600000.   12666980.        1781. | 16362660000.       264.2
CHEM MFG    |  4374478000.   14753230.         297. | 11717320000.   39810940.         294. |  7342846000.       167.9
SURF COATG  |   352367600.    1532198.         230. |  1891844000.    6634086.         285. |  1539476000.       436.9
FUEL COMB   |           0.      50938.           0. |           0.     108588.           0. |           0.         0.0
SOLV PURCH  |           0.          0.           0. |           0.          0.           0. |           0.         0.0
MISC        |   214639400.     809014.         265. |   545500400.    2084355.         262. |   330861000.       154.1
-----------------------------------------------------------------------------------------------------------------
            | 11134430000.   24133600.         461. | 36710270000.   61304950.         599. | 25575840000.       229.7
```

Appendix B
SENSITIVITY RUN OUTPUTS

High Growth Sensitivity Run

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  1:20 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                   |                 Proj Year = 1985                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  2261926   419131  5995826   850400  1269531  84.6 |  2417562   369108  6427623   611710   980818  88.9 |  -22.7
CHEM MFG   |  9029663   422308  6814311   668432  1090740  93.1 | 10473135   509202  7890584   478769   987971  94.6 |   -9.4
SURF COATG |  1408711   394641  1728687  1210559  1605200  48.8 |  1805284   544150  2157571   910277  1454427  63.3 |   -9.4
FUEL COMB  |   649795   607706   442590   433741  1041447   4.7 |   601355   559698   424658   410905   970604   5.4 |   -6.8
SOLV PURCH |  1355797  1355797  3240896  3240896  4596693   0.0 |  1657444  1657444  3889610  3889610  5547054   0.0 |   20.7
MISC       |   439043   281284   993342   342087   623371  56.5 |   501816   320225  1063440   299184   619409  60.4 |   -0.6
-----------------------------------------------------------------------------------------------------------------------------
           | 15144935  3480867 19215652  6746115 10226982  70.2 | 17456596  3959827 21853488  6600456 10560283  73.1 |    3.3
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  1:20 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------
Ind Cat    |            Base Year = 1980          |            Proj Year = 1985          |
ID         |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.    6988221.        886. |  9994072000.    7864368.       1271. |  3801130000.       61.4
CHEM MFG   |  4374478000.   14753230.        297. |  4953268000.   17375750.        285. |   578790400.       13.2
SURF COATG |   352367600.    1532198.        230. |   643680100.    2508428.        257. |   291312500.       82.7
FUEL COMB  |           0.      50938.          0. |           0.      55409.          0. |           0.        0.0
SOLV PURCH |           0.          0.          0. |           0.          0.          0. |           0.        0.0
MISC       |   214639400.     809014.        265. |   251622800.     945847.        266. |    36983330.       17.2
------------------------------------------------------------------------------------------------------------------
           | 11134430000.   24133600.        461. | 15842640000.   28749800.        551. |  4708216000.       42.3
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  1:36 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                   |                 Proj Year = 1990                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  2261926   419131  5995826   850400  1269531  84.6 |  2706820   348838  7189746   386549   735388  92.6 |  -42.1
CHEM MFG   |  9029663   422308  6814311   668432  1090740  93.1 | 14051092   657551 10652438   297297   954848  96.1 |  -12.5
SURF COATG |  1408711   394641  1728687  1210559  1605200  48.8 |  2208712   632342  2567882   689811  1322154  72.3 |  -17.6
FUEL COMB  |   649795   607706   442590   433741  1041447   4.7 |   724168   670962   512352   495804  1166767   5.6 |   12.0
SOLV PURCH |  1355797  1355797  3240896  3240896  4596693   0.0 |  2189725  2189725  5082762  5082762  7272486   0.0 |   58.2
MISC       |   439043   281284   993342   342087   623371  56.5 |   611841   368927  1293912   244654   613581  67.8 |   -1.6
-----------------------------------------------------------------------------------------------------------------------------
           | 15144935  3480867 19215652  6746115 10226982  70.2 | 22492358  4868346 27299092  7196878 12065224  75.8 |   18.0
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  1:36 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------
Ind Cat    |            Base Year = 1980          |            Proj Year = 1990          |
ID         |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.    6988221.        886. | 14714960000.    9161177.       1606. |  8522014000.      137.6
CHEM MFG   |  4374478000.   14753230.        297. |  7101400000.   23748680.        299. |  2726922000.       62.3
SURF COATG |   352367600.    1532198.        230. |   943139300.    3454440.        273. |   590771800.      167.7
FUEL COMB  |           0.      50938.          0. |           0.      69753.          0. |           0.        0.0
SOLV PURCH |           0.          0.          0. |           0.          0.          0. |           0.        0.0
MISC       |   214639400.     809014.        265. |   343191400.    1292172.        266. |   128552000.       59.9
------------------------------------------------------------------------------------------------------------------
           | 11134430000.   24133600.        461. | 23102690000.   37726230.        612. | 11968260000.      107.5
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  1:52 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                 Proj Year = 1995                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  2261926   419131  5995826   850400  1269531  84.6 |  2965230   326229  7775862   278033   604262  94.4 |  -52.4
CHEM MFG   |  9029663   422308  6814311   668432  1090740  93.1 | 16565761   762809 12688052   131939   894748  96.9 |  -18.0
SURF COATG |  1408711   394641  1728687  1210559  1605200  48.8 |  2561892   698679  2954286   479781  1178460  78.6 |  -26.6
FUEL COMB  |   649795   607706   442590   433741  1041447   4.7 |   744845   682807   532375   513725  1196532   6.3 |   14.9
SOLV PURCH |  1355797  1355797  3240896  3240896  4596693   0.0 |  2571648  2571648  5946048  5946048  8517696   0.0 |   85.3
MISC       |   439043   281284   993342   342087   623371  56.5 |   703689   426494  1466777   208106   634600  70.8 |    1.8
-------------------------------------------------------------------------------------------------------------------------
           | 15144935  3480867 19215652  6746115 10226982  70.2 | 26113064  5468666 31363400  7557633 13026298  77.3 |   27.4
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  1:52 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |          Proj Year = 1995           |
ID         |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.    6988221.       886. | 17674360000.   10136830.      1744. | 11481420000.      185.4
CHEM MFG   |  4374478000.   14753230.       297. |  8457893000.   28359070.       298. |  4083415000.       93.3
SURF COATG |   352367600.    1532198.       230. |  1207188000.    4337717.       278. |   854820500.      242.6
FUEL COMB  |           0.      50938.         0. |           0.      80688.         0. |           0.        0.0
SOLV PURCH |           0.          0.         0. |           0.          0.         0. |           0.        0.0
MISC       |   214639400.     809014.       265. |   407992700.    1535866.       266. |   193353300.       90.1
--------------------------------------------------------------------------------------------------------
           | 11134430000.   24133600.       461. | 27747430000.   44450160.       624. | 16613010000.      149.2
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:07 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                  |                 Proj Year = 2000                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  2261926   419131  5995826   850400  1269531  84.6 |  3254104   306427  8532243   167580   474007  96.0 |  -62.7
CHEM MFG   |  9029663   422308  6814311   668432  1090740  93.1 | 19301080   877661 14940122    30828   908489  97.3 |  -16.7
SURF COATG |  1408711   394641  1728687  1210559  1605200  48.8 |  2938729   775414  3445120   277559  1052972  83.5 |  -34.4
FUEL COMB  |   649795   607706   442590   433741  1041447   4.7 |   764284   692837   554487   533026  1225863   7.0 |   17.7
SOLV PURCH |  1355797  1355797  3240896  3240896  4596693   0.0 |  3014717  3014717  6994829  6994829 10009546   0.0 |  117.8
MISC       |   439043   281284   993342   342087   623371  56.5 |   805146   492914  1659813   178958   671872  72.7 |    7.8
-------------------------------------------------------------------------------------------------------------------------
           | 15144935  3480867 19215652  6746115 10226982  70.2 | 30078060  6159970 36126612  8182780 14342750  78.3 |   40.2
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:07 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %      Retire Rate = 5.0   %      Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |          Proj Year = 2000           |
ID         |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.    6988221.       886. | 20076350000.   11312340.      1775. | 13883410000.      224.2
CHEM MFG   |  4374478000.   14753230.       297. |  9883479000.   33332710.       297. |  5509001000.      125.9
SURF COATG |   352367600.    1532198.       230. |  1502262000.    5330877.       282. |  1149894000.      326.3
FUEL COMB  |           0.      50938.         0. |           0.      92908.         0. |           0.        0.0
SOLV PURCH |           0.          0.         0. |           0.          0.         0. |           0.        0.0
MISC       |   214639400.     809014.       265. |   475707900.    1793086.       265. |   261068500.      121.6
--------------------------------------------------------------------------------------------------------
           | 11134430000.   24133600.       461. | 31937800000.   51861920.       616. | 20803370000.      186.8
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:23 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                 |                  Proj Year = 2005                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  2261926   419131  5995826   850400  1269531  84.6 |  3610238   290831  9432643    69652   360484  97.2 |  -71.6
CHEM MFG   |  9029663   422308  6814311   668432  1090740  93.1 | 22324746  1007454 17444230     9720  1017174  97.4 |   -6.7
SURF COATG |  1408711   394641  1728687  1210559  1605200  48.8 |  3406484   874885  4017797    98344   973229  86.9 |  -39.4
FUEL COMB  |   649795   607706   442590   433741  1041447   4.7 |   784755   703046   580143   555366  1258412   7.8 |   20.8
SOLV PURCH |  1355797  1355797  3240896  3240896  4596693   0.0 |  3532635  3532635  8213028  8213028 11745663   0.0 |  155.5
MISC       |   439043   281284   993342   342087   623371  56.5 |   928409   575982  1879375   169503   745484  73.4 |   19.6
------------------------------------------------------------------------------------------------------------------------------
           | 15144935  3480867 19215652  6746115 10226982  70.2 | 34587264  6984834 41567216  9115613 16100446  78.9 |   57.4
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:23 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |           Proj Year = 2005          |
ID         |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.    6988221.       886. | 22668290000.   12682400.      1787. | 16475340000.      266.0
CHEM MFG   |  4374478000.   14753230.       297. | 11438070000.   38751800.       295. |  7063592000.      161.5
SURF COATG |   352367600.    1532198.       230. |  1834027000.    6451052.       284. |  1481660000.      420.5
FUEL COMB  |           0.      50938.         0. |           0.     106485.         0. |           0.        0.0
SOLV PURCH |           0.          0.         0. |           0.          0.         0. |           0.        0.0
MISC       |   214639400.     809014.       265. |   544254000.    2062300.       264. |   329614500.      153.6
-------------------------------------------------------------------------------------------------------------
           | 11134430000.   24133600.       461. | 36484640000.   60054030.       608. | 25350210000.      227.7
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:39 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                 |                  Proj Year = 2010                 |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  2261926   419131  5995826   850400  1269531  84.6 |  4010104   277659 10436593     8714   286373  98.0 |  -77.4
CHEM MFG   |  9029663   422308  6814311   668432  1090740  93.1 | 25833180  1161400 20386108        0  1161400  97.5 |    6.5
SURF COATG |  1408711   394641  1728687  1210559  1605200  48.8 |  3950611   998832  4689350        0   998832  88.4 |  -37.8
FUEL COMB  |   649795   607706   442590   433741  1041447   4.7 |   811234   717765   611460   582840  1300605   8.6 |   24.9
SOLV PURCH |  1355797  1355797  3240896  3240896  4596693   0.0 |  4140085  4140085  9644528  9644528 13784613   0.0 |  199.9
MISC       |   439043   281284   993342   342087   623371  56.5 |  1072382   674185  2130610   185128   859313  73.2 |   37.8
------------------------------------------------------------------------------------------------------------------------------
           | 15144935  3480867 19215652  6746115 10226982  70.2 | 39817600  7969927 47898652 10421209 18391136  79.0 |   79.8
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  2:39 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |           Proj Year = 2010          |
ID         |         Cost    Emis Red   Cost Eff |         Cost    Emis Red   Cost Eff |      Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.    6988221.       886. | 25557270000.   14160330.      1805. | 19364330000.      312.7
CHEM MFG   |  4374478000.   14753230.       297. | 13226930000.   45057890.       294. |  8852454000.      202.4
SURF COATG |   352367600.    1532198.       230. |  2192637000.    7641129.       287. |  1840270000.      522.3
FUEL COMB  |           0.      50938.         0. |           0.     122089.         0. |           0.        0.0
SOLV PURCH |           0.          0.         0. |           0.          0.         0. |           0.        0.0
MISC       |   214639400.     809014.       265. |   612610500.    2343680.       261. |   397971100.      185.4
-------------------------------------------------------------------------------------------------------------
           | 11134430000.   24133600.       461. | 41589450000.   69325120.       600. | 30455030000.      273.5
```

Low Growth Sensitivity Run

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 11:11 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                       |                Proj Year = 1985                        |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr     LOC   | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr     LOC   |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826   850400  1269531  84.6   |  2378171   364693  6316332   612029   976722  88.8   |  -23.1
CHEM MFG    |  9029663   422308  6814311   668432  1090740  93.1   | 10438478   507282  7866176   478999   986280  94.6   |   -9.6
SURF COATG  |  1408711   394641  1728687  1210559  1605200  48.8   |  1748515   527911  2087372   911677  1439588  62.5   |  -10.3
FUEL COMB   |   649795   607706   442590   433741  1041447   4.7   |   588459   547204   416690   403161   950365   5.5   |   -8.7
SOLV PURCH  |  1355797  1355797  3240896  3240896  4596693   0.0   |  1629088  1629088  3820992  3820992  5450081   0.0   |   18.6
MISC        |   439043   281284   993342   342087   623371  56.5   |   494678   316044  1053714   297155   613199  60.4   |   -1.6
------------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652  6746115 10226982  70.2   | 17277390  3892222 21561276  6524014 10416236  73.2   |    1.9
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 11:11 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |         Proj Year = 1985             |
ID          |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |     Abs Chg     Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |  6192942000.    6988221.       886.  |  9780982000.    7717781.      1267.  |  3588040000.      57.9
CHEM MFG    |  4374478000.   14753230.       297.  |  4934883000.   17318370.       285.  |   560405500.      12.8
SURF COATG  |   352367600.    1532198.       230.  |   614051600.    2396299.       256.  |   261684000.      74.3
FUEL COMB   |          0.      50938.         0.  |          0.      54784.         0.  |          0.        0.0
SOLV PURCH  |          0.          0.         0.  |          0.          0.         0.  |          0.        0.0
MISC        |   214639400.     809014.       265.  |   248928500.     935193.       266.  |    34289060.      16.0
-----------------------------------------------------------------------------------------------------------
            | 11134430000.   24133600.       461.  | 15578850000.   28422430.       548.  |  4444418000.      39.9
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 11:27 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                       |                Proj Year = 1990                        |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr     LOC   | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr     LOC   |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826   850400  1269531  84.6   |  2478200   333490  6549110   391883   725373  92.0   |  -42.9
CHEM MFG    |  9029663   422308  6814311   668432  1090740  93.1   | 12192209   574654  9293452   307606   882260  95.9   |  -19.1
SURF COATG  |  1408711   394641  1728687  1210559  1605200  48.8   |  1906016   545629  2209334   697113  1242742  69.8   |  -22.6
FUEL COMB   |   649795   607706   442590   433741  1041447   4.7   |   648954   601901   458233   443378  1045279   5.6   |    0.4
SOLV PURCH  |  1355797  1355797  3240896  3240896  4596693   0.0   |  1895760  1895760  4373879  4373879  6269639   0.0   |   36.4
MISC        |   439043   281284   993342   342087   623371  56.5   |   541531   329155  1156068   231223   560378  67.0   |  -10.1
------------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652  6746115 10226982  70.2   | 19662668  4280589 24040076  6445082 10725671  75.5   |    4.9
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 11:27 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |         Proj Year = 1990             |
ID          |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |     Abs Chg     Prct Chg
-----------------------------------------------------------------------------------------------------------
PETROLEUM   |  6192942000.    6988221.       886.  | 12832240000.    8301936.      1546.  |  6639298000.     107.2
CHEM MFG    |  4374478000.   14753230.       297.  |  6103115000.   20603400.       296.  |  1728637000.      39.5
SURF COATG  |   352367600.    1532198.       230.  |   768017000.    2872608.       267.  |   415649500.     118.0
FUEL COMB   |          0.      50938.         0.  |          0.      61907.         0.  |          0.        0.0
SOLV PURCH  |          0.          0.         0.  |          0.          0.         0.  |          0.        0.0
MISC        |   214639400.     809014.       265.  |   302295300.    1137221.       266.  |    87655840.      40.8
-----------------------------------------------------------------------------------------------------------
            | 11134430000.   24133600.       461.  | 20005660000.   32977070.       607.  |  8871238000.      79.7
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 11:42 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 1995                  |
ID          |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   2261926   419131  5995826   850400  1269531  84.6 |   2546121   299542  6653648   288392   587934  93.6 |  -53.7
CHEM MFG    |   9029663   422308  6814311   668432  1090740  93.1 |  13903864   642790 10711342   141962   784752  96.8 |  -28.1
SURF COATG  |   1408711   394641  1728687  1210559  1605200  48.8 |   2080492   563620  2398841   491114  1054734  76.5 |  -34.3
FUEL COMB   |    649795   607706   442590   433741  1041447   4.7 |    649095   596326   462956   447047  1043373   6.2 |    0.2
SOLV PURCH  |   1355797  1355797  3240896  3240896  4596693   0.0 |   2119771  2119771  4868998  4868998  6988769   0.0 |   52.0
MISC        |    439043   281284   993342   342087   623371  56.5 |    593920   365004  1244445   188028   553032  69.9 |  -11.3
-------------------------------------------------------------------------------------------------------------------------------
            |  15144935  3480867 19215652  6746115 10226982  70.2 |  21893262  4587052 26340230  6425541 11012594  77.2 |    7.7
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 11:42 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980          |           Proj Year = 1995          |
ID          |          Cost   Emis Red   Cost Eff |          Cost   Emis Red   Cost Eff |       Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |   6192942000.   6988221.       886. |  14498280000.   8611836.      1684. |   8305335000.      134.1
CHEM MFG    |   4374478000.  14753230.       297. |   7044803000.  23830450.       296. |   2670325000.       61.0
SURF COATG  |    352367600.   1532198.       230. |    943362400.   3424599.       275. |    590994800.      167.7
FUEL COMB   |            0.     50938.         0. |            0.     68678.         0. |            0.        0.0
SOLV PURCH  |            0.         0.         0. |            0.        -1.         0. |            0.        0.0
MISC        |    214639400.    809014.       265. |    341499900.   1285332.       266. |    126860400.       59.1
---------------------------------------------------------------------------------------------------------------
            |  11134430000.  24133600.       461. |  22827940000.  37220900.       613. |  11693510000.      105.0
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 11:58 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 2000                  |
ID          |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   2261926   419131  5995826   850400  1269531  84.6 |   2651360   268930  6933101   182259   451189  95.3 |  -64.5
CHEM MFG    |   9029663   422308  6814311   668432  1090740  93.1 |  15572983   708897 12133665    35784   744681  97.3 |  -31.7
SURF COATG  |   1408711   394641  1728687  1210559  1605200  48.8 |   2232030   585620  2631375   293621   879242  81.9 |  -45.2
FUEL COMB   |    649795   607706   442590   433741  1041447   4.7 |    641425   582973   464810   447304  1030277   6.9 |   -1.1
SOLV PURCH  |   1355797  1355797  3240896  3240896  4596693   0.0 |   2360281  2360281  5447951  5447951  7808232   0.0 |   69.9
MISC        |    439043   281284   993342   342087   623371  56.5 |    649556   403749  1343538   150447   554196  72.2 |  -11.1
-------------------------------------------------------------------------------------------------------------------------------
            |  15144935  3480867 19215652  6746115 10226982  70.2 |  24107636  4910450 28954438  6557366 11467817  78.4 |   12.1
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 11:58 AM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980          |           Proj Year = 2000          |
ID          |          Cost   Emis Red   Cost Eff |          Cost   Emis Red   Cost Eff |       Abs Chg   Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   |   6192942000.   6988221.       886. |  15585880000.   9133273.      1706. |   9392939000.      151.7
CHEM MFG    |   4374478000.  14753230.       297. |   7940384000.  26961970.       295. |   3565906000.       81.5
SURF COATG  |    352367600.   1532198.       230. |   1113672000.   3984164.       280. |    761304100.      216.1
FUEL COMB   |            0.     50938.         0. |            0.     75958.         0. |            0.        0.0
SOLV PURCH  |            0.         0.         0. |            0.         0.         0. |            0.        0.0
MISC        |    214639400.    809014.       265. |    381921900.   1438897.       265. |    167282500.       77.9
---------------------------------------------------------------------------------------------------------------
            |  11134430000.  24133600.       461. |  25021860000.  41594260.       602. |  13887430000.      124.7
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 12:14 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 2005                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826   850400  1269531  84.6 |  2812118   241830  7319912    79369   321198  96.8 |  -74.7
CHEM MFG    |  9029663   422308  6814311   668432  1090740  93.1 | 17152058   775194 13472142    10836   786030  97.4 |  -27.9
SURF COATG  |  1408711   394641  1728687  1210559  1605200  48.8 |  2454314   624965  2917938   117177   742142  86.2 |  -53.8
FUEL COMB   |   649795   607706   442590   433741  1041447   4.7 |   638571   574497   469704   450431  1024928   7.5 |   -1.6
SOLV PURCH  |  1355797  1355797  3240896  3240896  4596693   0.0 |  2642318  2642318  6112746  6112746  8755063   0.0 |   90.5
MISC        |   439043   281284   993342   342087   623371  56.5 |   715884   450321  1453605   129262   579583  73.3 |   -7.0
------------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652  6746115 10226982  70.2 | 26415264  5309124 31746046  6899820 12208944  79.0 |   19.4
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 12:14 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |            Proj Year = 2005           |
ID          |         Cost    Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |        Abs Chg   Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |  6192942000.    6988221.       886. | 16829630000.    9810831.      1715. | 10636690000.      171.8
CHEM MFG    |  4374478000.   14753230.       297. |  8755234000.   29838170.       293. |  4380756000.      100.1
SURF COATG  |   352367600.    1532198.       230. |  1303403000.    4630110.       282. |   951035500.      269.9
FUEL COMB   |           0.      50938.         0. |            0.      83347.         0. |            0.       0.0
SOLV PURCH  |           0.          0.         0. |            0.          0.         0. |            0.       0.0
MISC        |   214639400.     809014.       265. |   420473400.    1589906.       264. |   205834000.       95.9
----------------------------------------------------------------------------------------------------------
            | 11134430000.   24133600.       461. | 27308740000.   45952370.       594. | 16174310000.      145.3
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 12:30 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                  |                  Proj Year = 2010                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826   850400  1269531  84.6 |  2986084   215421  7733866     9912   225333  97.9 |  -82.3
CHEM MFG    |  9029663   422308  6814311   668432  1090740  93.1 | 18897284   851974 14968370        0   851974  97.5 |  -21.9
SURF COATG  |  1408711   394641  1728687  1210559  1605200  48.8 |  2699878   676085  3237862        0   676085  88.6 |  -57.9
FUEL COMB   |   649795   607706   442590   433741  1041447   4.7 |   638394   568132   476861   455628  1023760   8.2 |   -1.7
SOLV PURCH  |  1355797  1355797  3240896  3240896  4596693   0.0 |  2958548  2958548  6859698  6859698  9818246   0.0 |  113.6
MISC        |   439043   281284   993342   342087   623371  56.5 |   790238   503032  1575134   131325   634357  73.2 |    1.8
------------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652  6746115 10226982  70.2 | 28970426  5773192 34851788  7456562 13229754  79.3 |   29.4
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 12:30 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980           |            Proj Year = 2010           |
ID          |         Cost    Emis Red   Cost Eff |          Cost    Emis Red   Cost Eff |        Abs Chg   Prct Chg
----------------------------------------------------------------------------------------------------------
PETROLEUM   |  6192942000.    6988221.       886. | 18146950000.   10494620.      1729. | 11954010000.      193.0
CHEM MFG    |  4374478000.   14753230.       297. |  9644154000.   33013680.       292. |  5269676000.      120.5
SURF COATG  |   352367600.    1532198.       230. |  1492597000.    5261656.       284. |  1140229000.      323.6
FUEL COMB   |           0.      50938.         0. |            0.      91495.         0. |            0.       0.0
SOLV PURCH  |           0.          0.         0. |            0.          0.         0. |            0.       0.0
MISC        |   214639400.     809014.       265. |   453224900.    1731015.       262. |   238585500.      111.2
----------------------------------------------------------------------------------------------------------
            | 11134430000.   24133600.       461. | 29736920000.   50592460.       588. | 18602500000.      167.1
```

No Existing Level of Control Sensitivity Run

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:10 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                   |                   Proj Year = 1985                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  2261926   419131  5995826   850400  1269531  84.6 |  2385558   683107  6344020   626620  1309727  85.0 |    3.2
CHEM MFG   |  9029663   422308  6814311   668432  1090740  93.1 | 10470285  3634939  7888866   449709  4084648  77.8 |  274.5
SURF COATG |  1408711   394641  1728687  1210559  1605200  48.8 |  1774023   948985  2122349   919018  1868004  52.1 |   16.4
FUEL COMB  |   649795   607706   442590   433741  1041447   4.7 |   595116   561942   421207   409562   971504   4.4 |   -6.7
SOLV PURCH |  1355797  1355797  3240896  3240896  4596693   0.0 |  1636856  1636856  3841434  3841434  5478290   0.0 |   19.2
MISC       |   439043   281284   993342   342087   623371  56.5 |   497657   368558  1057843   311499   680057  56.3 |    9.1
--------------------------------------------------------------------------------------------------------------------------
           | 15144935  3480867 19215652  6746115 10226982  70.2 | 17359494  7834386 21675718  6557843 14392230  63.1 |   40.7
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:10 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |            Proj Year = 1985           |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |       Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.   6988221.       886. |  9159479000.   7419850.      1234. |   2966538000.       47.9
CHEM MFG   |  4374478000.  14753230.       297. |  2919093000.  14274500.       204. |  -1455385000.      -33.3
SURF COATG |   352367600.   1532198.       230. |   534120600.   2028369.       263. |    181753100.       51.6
FUEL COMB  |           0.     50938.         0. |           0.     44819.         0. |            0.        0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |            0.        0.0
MISC       |   214639400.    809014.       265. |   233137700.    875443.       266. |     18498260.        8.6
-------------------------------------------------------------------------------------------------------------
           | 11134430000.  24133600.       461. | 12845830000.  24642980.       521. |   1711403000.       15.4
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:26 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                   |                   Proj Year = 1990                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
--------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  2261926   419131  5995826   850400  1269531  84.6 |  2670562  1048229  7088810   367779  1416008  85.5 |   11.5
CHEM MFG   |  9029663   422308  6814311   668432  1090740  93.1 | 13333606  6932840 10112627   269896  7202736  69.3 |  560.4
SURF COATG |  1408711   394641  1728687  1210559  1605200  48.8 |  2137227  1442227  2483296   691053  2133280  53.8 |   32.9
FUEL COMB  |   649795   607706   442590   433741  1041447   4.7 |   703545   674577   496248   486065  1160642   3.3 |   11.4
SOLV PURCH |  1355797  1355797  3240896  3240896  4596693   0.0 |  2101400  2101400  4877878  4877878  6979278   0.0 |   51.8
MISC       |   439043   281284   993342   342087   623371  56.5 |   592984   466229  1255735   275787   742017  59.9 |   19.0
--------------------------------------------------------------------------------------------------------------------------
           | 15144935  3480867 19215652  6746115 10226982  70.2 | 21539326 12665502 26314594  6968458 19633960  59.0 |   92.0
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:26 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980           |            Proj Year = 1990           |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |       Abs Chg   Prct Chg
-------------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.   6988221.       886. | 12791710000.   8343364.      1533. |   6598771000.      106.6
CHEM MFG   |  4374478000.  14753230.       297. |  4171834000.  16243500.       257. |   -202643700.       -4.6
SURF COATG |   352367600.   1532198.       230. |   733355300.   2487243.       295. |    380987800.      108.1
FUEL COMB  |           0.     50938.         0. |           0.     39152.         0. |            0.        0.0
SOLV PURCH |           0.         0.         0. |           0.         0.         0. |            0.        0.0
MISC       |   214639400.    809014.       265. |   293709600.   1106703.       265. |     79070210.       36.8
-------------------------------------------------------------------------------------------------------------
           | 11134430000.  24133600.       461. | 17990610000.  28219960.       638. |   6856186000.       61.6
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:42 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                  |                   Proj Year = 1995                 |
ID         |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   2261926   419131  5995826   850400  1269531  84.6 |  2850894  1333919  7475366   255024  1588944  84.6 |   25.2
CHEM MFG   |   9029663   422308  6814311   668432  1090740  93.1 | 15740994  9909635 12063985   128874 10038509  63.9 |  820.3
SURF COATG |   1408711   394641  1728687  1210559  1605200  48.8 |  2422745  1855535  2793407   482558  2338093  55.2 |   45.7
FUEL COMB  |    649795   607706   442590   433741  1041447   4.7 |   725690   701060   517197   508569  1209628   2.7 |   16.1
SOLV PURCH |   1355797  1355797  3240896  3240896  4596693   0.0 |  2425385  2425385  5607657  5607657  8033042   0.0 |   74.8
MISC       |    439043   281284   993342   342087   623371  56.5 |   670635   570422  1401845   255763   826186  60.1 |   32.5
------------------------------------------------------------------------------------------------------------------------------
           |  15144935  3480867 19215652  6746115 10226982  70.2 | 24836340 16795956 29859460  7238445 24034400  56.1 |  135.0
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:42 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980               |           Proj Year = 1995               |
ID         |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.    6988221.        886. | 13893920000.    8737317.       1590. |  7700974000.       124.4
CHEM MFG   |  4374478000.   14753230.        297. |  4746533000.   17766470.        267. |   372055000.         8.5
SURF COATG |   352367600.    1532198.        230. |   889503600.    2878059.        309. |   537136100.       152.4
FUEL COMB  |           0.      50938.          0. |           0.      33258.          0. |           0.         0.0
SOLV PURCH |           0.          0.          0. |           0.          0.          0. |           0.         0.0
MISC       |   214639400.     809014.        265. |   330112400.    1246294.        265. |   115472900.        53.8
-------------------------------------------------------------------------------------------------------------------
           | 11134430000.   24133600.        461. | 19860070000.   30661400.        648. |  8725639000.        78.4
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:57 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                   Base Year = 1980                  |                   Proj Year = 2000                 |
ID         |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   2261926   419131  5995826   850400  1269531  84.6 |  3038463  1620132  7966820   151023  1771155  83.9 |   39.5
CHEM MFG   |   9029663   422308  6814311   668432  1090740  93.1 | 18001568 12737449 13942507    30852 12768301  60.0 | 1070.6
SURF COATG |   1408711   394641  1728687  1210559  1605200  48.8 |  2683744  2244544  3149432   283382  2527927  56.7 |   57.5
FUEL COMB  |    649795   607706   442590   433741  1041447   4.7 |   733166   712874   530047   522973  1235847   2.2 |   18.7
SOLV PURCH |   1355797  1355797  3240896  3240896  4596693   0.0 |  2770817  2770817  6428562  6428562  9199378   0.0 |  100.1
MISC       |    439043   281284   993342   342087   623371  56.5 |   747130   671635  1545778   240726   912361  60.2 |   46.4
------------------------------------------------------------------------------------------------------------------------------
           |  15144935  3480867 19215652  6746115 10226982  70.2 | 27974886 20757450 33563148  7657519 28414968  53.8 |  177.8
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  9:57 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------
Ind Cat    |           Base Year = 1980               |           Proj Year = 2000               |
ID         |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg    Prct Chg
-------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.    6988221.        886. | 15035360000.    9234128.       1628. |  8842422000.       142.8
CHEM MFG   |  4374478000.   14753230.        297. |  5339169000.   19175770.        278. |   964690900.        22.1
SURF COATG |   352367600.    1532198.        230. |  1054304000.    3305249.        319. |   701936800.       199.2
FUEL COMB  |           0.      50938.          0. |           0.      27365.          0. |           0.         0.0
SOLV PURCH |           0.          0.          0. |           0.          0.          0. |           0.         0.0
MISC       |   214639400.     809014.        265. |   364809900.    1380547.        264. |   150170500.        70.0
-------------------------------------------------------------------------------------------------------------------
           | 11134430000.   24133600.        461. | 21793650000.   33123060.        658. | 10659220000.        95.7
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:13 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                  |                 Proj Year = 2005                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826   850400  1269531  84.6 |  3300651  1949721  8622876    69816  2019537  83.1 |    59.1
CHEM MFG    |  9029663   422308  6814311   668432  1090740  93.1 | 20271858 13839892 15837728     9863 13849755  61.6 |  1169.8
SURF COATG  |  1408711   394641  1728687  1210559  1605200  48.8 |  3034178  2722825  3579201   105353  2828178  57.2 |    76.2
FUEL COMB   |   649795   607706   442590   433741  1041447   4.7 |   741969   726015   545340   539820  1265836   1.7 |    21.5
SOLV PURCH  |  1355797  1355797  3240896  3240896  4596693   0.0 |  3170398  3170398  7370737  7370737 10541136   0.0 |   129.3
MISC        |   439043   281284   993342   342087   623371  56.5 |   842436   786322  1711016   246202  1032524  59.6 |    65.6
------------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652  6746115 10226982  70.2 | 31361490 23195174 37666896  8341792 31536966  54.3 |   208.4
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:13 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |           Proj Year = 2005            |
ID          |        Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg  Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   | 6192942000.   6988221.       886. | 16357200000.   9903990.      1652. | 10164260000.     164.1
CHEM MFG    | 4374478000.  14753230.       297. |  6868013000.  22259830.       309. |  2493535000.      57.0
SURF COATG  |  352367600.   1532198.       230. |  1234185000.   3785200.       326. |   881817300.     250.3
FUEL COMB   |          0.     50938.         0. |           0.     21472.         0. |           0.       0.0
SOLV PURCH  |          0.         0.         0. |           0.         0.         0. |           0.       0.0
MISC        |  214639400.    809014.       265. |   399545200.   1520928.       263. |   184905800.      86.1
---------------------------------------------------------------------------------------------------------------
            |11134430000.  24133600.       461. | 24858940000.  37491420.       663. | 13724520000.     123.3
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:29 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                  |                 Proj Year = 2010                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |    %Chg
------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826   850400  1269531  84.6 |  3589190  2291801  9339191     9162  2300962  82.2 |    81.2
CHEM MFG    |  9029663   422308  6814311   668432  1090740  93.1 | 22835586 15617129 18002932        0 15617129  61.8 |  1331.8
SURF COATG  |  1408711   394641  1728687  1210559  1605200  48.8 |  3431962  3251905  4070568        0  3251905  56.7 |   102.6
FUEL COMB   |   649795   607706   442590   433741  1041447   4.7 |   754943   743328   564419   560455  1303783   1.2 |    25.2
SOLV PURCH  |  1355797  1355797  3240896  3240896  4596693   0.0 |  3628086  3628086  8451993  8451993 12080079   0.0 |   162.8
MISC        |   439043   281284   993342   342087   623371  56.5 |   951502   904078  1896249   276902  1180980  58.5 |    89.5
------------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652  6746115 10226982  70.2 | 35191268 26436326 42325352  9298511 35734836  53.9 |   249.4
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run: 10:29 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |           Proj Year = 2010            |
ID          |        Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg  Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   | 6192942000.   6988221.       886. | 17808970000.  10627420.      1676. | 11616030000.     187.6
CHEM MFG    | 4374478000.  14753230.       297. |  7731731000.  25221390.       307. |  3357254000.      76.7
SURF COATG  |  352367600.   1532198.       230. |  1416601000.   4250625.       333. |  1064233000.     302.0
FUEL COMB   |          0.     50938.         0. |           0.     15579.         0. |           0.       0.0
SOLV PURCH  |          0.         0.         0. |           0.         0.         0. |           0.       0.0
MISC        |  214639400.    809014.       265. |   434217000.   1666771.       261. |   219577500.     102.3
---------------------------------------------------------------------------------------------------------------
            |11134430000.  24133600.       461. | 27391520000.  41781780.       656. | 16257090000.     146.0
```

No Offset Constraints Sensitivity Run

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  4:21 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                  |                  Proj Year = 1985                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  2261926   419131  5995826   850400  1269531  84.6 |  2385558   365390  6344020   729227  1094617  87.5 |  -13.8
CHEM MFG   |  9029663   422308  6814311   668432  1090740  93.1 | 10470285   508951  7888866   742083  1251034  93.2 |   14.7
SURF COATG |  1408711   394641  1728687  1210559  1605200  48.8 |  1774023   535842  2122349  1377651  1913493  50.9 |   19.2
FUEL COMB  |   649795   607706   442590   433741  1041447   4.7 |   595116   553593   421207   407581   961173   5.4 |   -7.7
SOLV PURCH |  1355797  1355797  3240896  3240896  4596693   0.0 |  1636856  1636856  3841434  3841434  5478290   0.0 |   19.2
MISC       |   439043   281284   993342   342087   623371  56.5 |   497657   317939  1057843   369876   687814  55.8 |   10.3
-----------------------------------------------------------------------------------------------------------------------------
           | 15144935  3480867 19215652  6746115 10226982  70.2 | 17359494  3918570 21675718  7467852 11386421  70.8 |   11.3
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  4:21 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat    |         Base Year = 1980          |         Proj Year = 1985          |
ID         |         Cost   Emis Red  Cost Eff |         Cost   Emis Red  Cost Eff |     Abs Chg  Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.   6988221.      886. |  6924119000.   7634961.      907. |  731177500.      11.8
CHEM MFG   |  4374478000.  14753230.      297. |  4888653000.  17108120.      286. |  514175000.      11.8
SURF COATG |   352367600.   1532198.      230. |   506437500.   1982879.      255. |  154070000.      43.7
FUEL COMB  |           0.     50938.        0. |           0.     55150.        0. |          0.       0.0
SOLV PURCH |           0.         0.        0. |           0.         0.        0. |          0.       0.0
MISC       |   214639400.    809014.      265. |   228701800.    867685.      264. |   14062400.       6.6
---------------------------------------------------------------------------------------------------------
           | 11134430000.  24133600.      461. | 12547910000.  27648790.      454. | 1413485000.      12.7
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  4:37 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                  |                  Proj Year = 1990                  |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  2261926   419131  5995826   850400  1269531  84.6 |  2670562   345599  7088810   617001   962600  90.1 |  -24.2
CHEM MFG   |  9029663   422308  6814311   668432  1090740  93.1 | 13333606   627119 10112627   912911  1540030  93.4 |   41.2
SURF COATG |  1408711   394641  1728687  1210559  1605200  48.8 |  2137227   613886  2483296  1536131  2150017  53.5 |   33.9
FUEL COMB  |   649795   607706   442590   433741  1041447   4.7 |   703545   652202   496248   480125  1132327   5.6 |    8.7
SOLV PURCH |  1355797  1355797  3240896  3240896  4596693   0.0 |  2101400  2101400  4877878  4877878  6979278   0.0 |   51.8
MISC       |   439043   281284   993342   342087   623371  56.5 |   592984   357383  1255735   406052   763435  58.7 |   22.5
-----------------------------------------------------------------------------------------------------------------------------
           | 15144935  3480867 19215652  6746115 10226982  70.2 | 21539326  4697590 26314594  8830097 13527687  71.7 |   32.3
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  4:37 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------
Ind Cat    |         Base Year = 1980          |         Proj Year = 1990          |
ID         |         Cost   Emis Red  Cost Eff |         Cost   Emis Red  Cost Eff |     Abs Chg  Prct Chg
---------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.   6988221.      886. |  8157007000.   8796772.      927. | 1964066000.      31.7
CHEM MFG   |  4374478000.  14753230.      297. |  6604483000.  21906200.      301. | 2230005000.      51.0
SURF COATG |   352367600.   1532198.      230. |   654089500.   2470506.      265. |  301721900.      85.6
FUEL COMB  |           0.     50938.        0. |           0.     67467.        0. |          0.       0.0
SOLV PURCH |           0.         0.        0. |           0.         0.        0. |          0.       0.0
MISC       |   214639400.    809014.      265. |   282474400.   1085284.      260. |   67835010.      31.6
---------------------------------------------------------------------------------------------------------
           | 11134430000.  24133600.      461. | 15698050000.  34326230.      457. | 4563627000.      41.0
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  4:53 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                    |                 Proj Year = 1995                    |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826   850400  1269531  84.6 |  2850894   318259  7475366   605270   923529  91.1 |  -27.3
CHEM MFG    |  9029663   422308  6814311   668432  1090740  93.1 | 15740994   726324 12063985  1066793  1793117  93.6 |   64.4
SURF COATG  |  1408711   394641  1728687  1210559  1605200  48.8 |  2422745   663253  2793407  1670355  2333608  55.3 |   45.4
FUEL COMB   |   649795   607706   442590   433741  1041447   4.7 |   725690   666523   517197   499396  1165920   6.2 |   12.0
SOLV PURCH  |  1355797  1355797  3240896  3240896  4596693   0.0 |  2425385  2425385  5607657  5607657  8033042   0.0 |   74.8
MISC        |   439043   281284   993342   342087   623371  56.5 |   670635   406940  1401845   451147   858088  58.6 |   37.7
----------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652  6746115 10226982  70.2 | 24836340  5206684 29859460  9900618 15107302  72.4 |   47.7
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  4:53 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980           |           Proj Year = 1995           |
ID          |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |  6192942000.    6988221.        886. |  8920796000.    9402731.        949. |  2727855000.       44.0
CHEM MFG    |  4374478000.   14753230.        297. |  7852356000.   26011860.        302. |  3477878000.       79.5
SURF COATG  |   352367600.    1532198.        230. |   781554500.    2882544.        271. |   429186900.      121.8
FUEL COMB   |           0.      50938.          0. |           0.      76967.          0. |           0.        0.0
SOLV PURCH  |           0.          0.          0. |           0.          0.          0. |           0.        0.0
MISC        |   214639400.     809014.        265. |   314128700.    1214392.        259. |    99489310.       46.4
------------------------------------------------------------------------------------------------------------
            | 11134430000.   24133600.        461. | 17868830000.   39588500.        451. |  6734408000.       60.5
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  5:09 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                 Base Year = 1980                    |                 Proj Year = 2000                    |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826   850400  1269531  84.6 |  3038463   292559  7966820   600243   892802  91.9 |  -29.7
CHEM MFG    |  9029663   422308  6814311   668432  1090740  93.1 | 18001568   818228 13942507  1209086  2027314  93.7 |   85.9
SURF COATG  |  1408711   394641  1728687  1210559  1605200  48.8 |  2683744   711066  3149432  1849795  2560862  56.1 |   59.5
FUEL COMB   |   649795   607706   442590   433741  1041447   4.7 |   733166   666590   530047   510085  1176675   6.9 |   13.0
SOLV PURCH  |  1355797  1355797  3240896  3240896  4596693   0.0 |  2770817  2770817  6428562  6428562  9199378   0.0 |  100.1
MISC        |   439043   281284   993342   342087   623371  56.5 |   747130   458634  1545778   494734   953369  58.4 |   52.9
----------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652  6746115 10226982  70.2 | 27974886  5717896 33563148 11092505 16810400  72.7 |   64.4
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  5:09 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
------------------------------------------------------------------------------------------------------------
Ind Cat     |           Base Year = 1980           |           Proj Year = 2000           |
ID          |         Cost    Emis Red    Cost Eff |         Cost    Emis Red    Cost Eff |      Abs Chg   Prct Chg
------------------------------------------------------------------------------------------------------------
PETROLEUM   |  6192942000.    6988221.        886. |  9712878000.   10112480.        960. |  3519936000.       56.8
CHEM MFG    |  4374478000.   14753230.        297. |  9000864000.   29916760.        301. |  4626386000.      105.8
SURF COATG  |   352367600.    1532198.        230. |   902020800.    3272314.        276. |   549653200.      156.0
FUEL COMB   |           0.      50938.          0. |           0.      86537.          0. |           0.        0.0
SOLV PURCH  |           0.          0.          0. |           0.          0.          0. |           0.        0.0
MISC        |   214639400.     809014.        265. |   344092800.    1339539.        257. |   129453300.       60.3
------------------------------------------------------------------------------------------------------------
            | 11134430000.   24133600.        461. | 19959860000.   44727630.        446. |  8825428000.       79.3
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  5:24 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                   Proj Year = 2005                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826   850400  1269531  84.6 |  3300651   271677  8622876   605447   877123  92.6 |  -30.9
CHEM MFG    |  9029663   422308  6814311   668432  1090740  93.1 | 20271858   914907 15837728  1363590  2278498  93.7 |  108.9
SURF COATG  |  1408711   394641  1728687  1210559  1605200  48.8 |  3034178   781124  3579201  2078704  2859828  56.8 |   78.2
FUEL COMB   |   649795   607706   442590   433741  1041447   4.7 |   741969   667584   545340   522804  1190388   7.5 |   14.3
SOLV PURCH  |  1355797  1355797  3240896  3240896  4596693   0.0 |  3170398  3170398  7370737  7370737 10541136   0.0 |  129.3
MISC        |   439043   281284   993342   342087   623371  56.5 |   842436   523858  1711016   546441  1070299  58.1 |   71.7
----------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652  6746115 10226982  70.2 | 31361490  6329548 37666896 12487723 18817272  72.7 |   84.0
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  5:24 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |            Proj Year = 2005             |
ID          |        Cost    Emis Red    Cost Eff |           Cost    Emis Red    Cost Eff |        Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   | 6192942000.    6988221.        886. | 10637610000.   11046400.        963. |  4444668000.       71.8
CHEM MFG    | 4374478000.   14753230.        297. | 10173610000.   33831090.        301. |  5799132000.      132.6
SURF COATG  |  352367600.    1532198.        230. |  1041484000.    3753551.        277. |   689116500.      195.6
FUEL COMB   |          0.      50938.          0. |            0.      96920.          0. |           0.        0.0
SOLV PURCH  |          0.          0.          0. |            0.          0.          0. |           0.        0.0
MISC        |  214639400.     809014.        265. |   377405100.    1483153.        254. |   162765700.       75.8
---------------------------------------------------------------------------------------------------------------
            | 11134430000.  24133600.        461. | 22230110000.   50211120.        443. | 11095680000.       99.7
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  5:40 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
----------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                  Base Year = 1980                   |                   Proj Year = 2010                  |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
----------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |  2261926   419131  5995826   850400  1269531  84.6 |  3589190   252244  9339191   614565   866810  93.3 |  -31.7
CHEM MFG    |  9029663   422308  6814311   668432  1090740  93.1 | 22835586  1027572 18002932  1548934  2576506  93.7 |  136.2
SURF COATG  |  1408711   394641  1728687  1210559  1605200  48.8 |  3431962   868443  4070568  2349884  3218327  57.1 |  100.5
FUEL COMB   |   649795   607706   442590   433741  1041447   4.7 |   754943   671812   564419   538962  1210774   8.2 |   16.3
SOLV PURCH  |  1355797  1355797  3240896  3240896  4596693   0.0 |  3628086  3628086  8451993  8451993 12080079   0.0 |  162.8
MISC        |   439043   281284   993342   342087   623371  56.5 |   951502   599365  1896249   604114  1203478  57.7 |   93.1
----------------------------------------------------------------------------------------------------------------------------
            | 15144935  3480867 19215652  6746115 10226982  70.2 | 35191268  7047522 42325352 14108452 21155974  72.7 |  106.9
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  5:40 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------
Ind Cat     |         Base Year = 1980             |            Proj Year = 2010             |
ID          |        Cost    Emis Red    Cost Eff |           Cost    Emis Red    Cost Eff |        Abs Chg    Prct Chg
---------------------------------------------------------------------------------------------------------------
PETROLEUM   | 6192942000.    6988221.        886. | 11779320000.   12061570.        977. |  5586375000.       90.2
CHEM MFG    | 4374478000.   14753230.        297. | 11466330000.   38262010.        300. |  7091852000.      162.1
SURF COATG  |  352367600.    1532198.        230. |  1202164000.    4284202.        281. |   849796700.      241.2
FUEL COMB   |          0.      50938.          0. |            0.     108588.          0. |           0.        0.0
SOLV PURCH  |          0.          0.          0. |            0.          0.          0. |           0.        0.0
MISC        |  214639400.     809014.        265. |   414434400.    1644273.        252. |   199795000.       93.1
---------------------------------------------------------------------------------------------------------------
            | 11134430000.  24133600.        461. | 24862250000.   56360640.        441. | 13727820000.      123.3
```

No Solvent Purchased Category Sensitivity Run

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  7:31 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                   |                  Proj Year = 1985                   |
ID         |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   2261926   419131  5995826   850400  1269531  84.6 |   2385558   365390  6344020   611880   977270  88.8 |  -23.0
CHEM MFG   |   9029663   422308  6814311   668432  1090740  93.1 |  10470285   508951  7888866   478788   987739  94.6 |   -9.4
SURF COATG |   1408711   394641  1728687  1210559  1605200  48.8 |   1774023   535842  2122349   910979  1446821  62.9 |   -9.9
FUEL COMB  |    649795   607706   442590   433741  1041447   4.7 |    595116   553593   421207   407581   961173   5.4 |   -7.7
MISC       |    439043   281284   993342   342087   623371  56.5 |    497657   317939  1057843   298072   616010  60.4 |   -1.2
-------------------------------------------------------------------------------------------------------------------------------
           |  13789138  2125070 15974756  3505219  5630289  81.1 |  15722639  2281714 17834284  2707298  4989013  85.1 |  -11.4
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  7:31 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980          |          Proj Year = 1985          |
ID         |         Cost   Emis Red    Cost Eff |         Cost   Emis Red    Cost Eff |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.   6988221.        886. |  9874741000.   7752308.       1274. |  3681800000.        59.5
CHEM MFG   |  4374478000.  14753230.        297. |  4951831000.  17371410.        285. |   577352700.        13.2
SURF COATG |   352367600.   1532198.        230. |   628308200.   2449551.        256. |   275940600.        78.3
FUEL COMB  |           0.     50938.          0. |           0.     55150.          0. |           0.         0.0
MISC       |   214639400.    809014.        265. |   249939400.    939489.        266. |    35299970.        16.4
-----------------------------------------------------------------------------------------------------------------
           | 11134430000.  24133600.        461. | 15704820000.  28567910.        550. |  4570392000.        41.0
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  7:46 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-------------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                  Base Year = 1980                   |                  Proj Year = 1990                   |
ID         |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |  Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-------------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |   2261926   419131  5995826   850400  1269531  84.6 |   2670562   345599  7088810   387544   733143  92.5 |  -42.3
CHEM MFG   |   9029663   422308  6814311   668432  1090740  93.1 |  13333606   627119 10112627   301174   928293  96.0 |  -14.9
SURF COATG |   1408711   394641  1728687  1210559  1605200  48.8 |   2137227   613886  2483296   691557  1305443  71.7 |  -18.7
FUEL COMB  |    649795   607706   442590   433741  1041447   4.7 |    703545   652202   496248   480125  1132327   5.6 |    8.7
MISC       |    439043   281284   993342   342087   623371  56.5 |    592984   357383  1255735   241905   599288  67.6 |   -3.9
-------------------------------------------------------------------------------------------------------------------------------
           |  13789138  2125070 15974756  3505219  5630289  81.1 |  19437926  2596190 21436716  2102304  4698494  88.5 |  -16.5
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  7:46 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------
Ind Cat    |          Base Year = 1980          |          Proj Year = 1990          |
ID         |         Cost   Emis Red    Cost Eff |         Cost   Emis Red    Cost Eff |      Abs Chg    Prct Chg
-----------------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.   6988221.        886. | 14258960000.   9026229.       1580. |  8066020000.       130.2
CHEM MFG   |  4374478000.  14753230.        297. |  6724213000.  22517940.        299. |  2349735000.        53.7
SURF COATG |   352367600.   1532198.        230. |   900893600.   3315080.        272. |   548526000.       155.7
FUEL COMB  |           0.     50938.          0. |           0.     67467.          0. |           0.         0.0
MISC       |   214639400.    809014.        265. |   331866600.   1249432.        266. |   117227200.        54.6
-----------------------------------------------------------------------------------------------------------------
           | 11134430000.  24133600.        461. | 22215930000.  36176150.        614. | 11081500000.        99.5
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  8:02 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                   |                 Proj Year = 1995                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  2261926   419131  5995826   850400  1269531  84.6 |  2850894   318259  7475366   280792   599052  94.2 |  -52.8
CHEM MFG   |  9029663   422308  6814311   668432  1090740  93.1 | 15740994   726324 12063985   134314   860638  96.9 |  -21.1
SURF COATG |  1408711   394641  1728687  1210559  1605200  48.8 |  2422745   663253  2793407   483074  1146327  78.0 |  -28.6
FUEL COMB  |   649795   607706   442590   433741  1041447   4.7 |   725690   666523   517197   499396  1165920   6.2 |   12.0
MISC       |   439043   281284   993342   342087   623371  56.5 |   670635   406940  1401845   202678   609618  70.6 |   -2.2
-----------------------------------------------------------------------------------------------------------------------------
           | 13789138  2125070 15974756  3505219  5630289  81.1 | 22410956  2781300 24251802  1600255  4381555  90.6 |  -22.2
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  8:02 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |            Base Year = 1980        |            Proj Year = 1995        |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.   6988221.       886. | 16852810000.   9727208.      1733. | 10659870000.      172.1
CHEM MFG   |  4374478000.  14753230.       297. |  8018842000.  26944340.       298. |  3644364000.       83.3
SURF COATG |   352367600.   1532198.       230. |  1128308000.   4069825.       277. |   775940500.      220.2
FUEL COMB  |           0.     50938.         0. |           0.     76967.         0. |           0.        0.0
MISC       |   214639400.    809014.       265. |   388760500.   1462861.       266. |   174121100.       81.1
--------------------------------------------------------------------------------------------------------------
           | 11134430000.  24133600.       461. | 26388720000.  42281200.       624. | 15254290000.      137.0
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  8:18 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
-----------------------------------------------------------------------------------------------------------------------------
Ind Cat    |                 Base Year = 1980                   |                 Proj Year = 2000                   |
ID         | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr   LOC |   %Chg
-----------------------------------------------------------------------------------------------------------------------------
PETROLEUM  |  2261926   419131  5995826   850400  1269531  84.6 |  3038463   292559  7966820   172721   465280  95.8 |  -63.4
CHEM MFG   |  9029663   422308  6814311   668432  1090740  93.1 | 18001568   818228 13942507    32575   850803  97.3 |  -22.0
SURF COATG |  1408711   394641  1728687  1210559  1605200  48.8 |  2683744   711066  3149432   283383   994450  83.0 |  -38.0
FUEL COMB  |   649795   607706   442590   433741  1041447   4.7 |   733166   666590   530047   510085  1176675   6.9 |   13.0
MISC       |   439043   281284   993342   342087   623371  56.5 |   747130   458634  1545778   169103   627737  72.6 |    0.7
-----------------------------------------------------------------------------------------------------------------------------
           | 13789138  2125070 15974756  3505219  5630289  81.1 | 25204070  2947078 27134584  1167867  4114945  92.1 |  -26.9
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  8:18 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat    |            Base Year = 1980        |            Proj Year = 2000        |
ID         |         Cost   Emis Red   Cost Eff |         Cost   Emis Red   Cost Eff |      Abs Chg   Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM  |  6192942000.   6988221.       886. | 18556110000.  10540000.      1761. | 12363170000.      199.6
CHEM MFG   |  4374478000.  14753230.       297. |  9213013000.  31093270.       296. |  4838535000.      110.6
SURF COATG |   352367600.   1532198.       230. |  1360214000.   4838726.       281. |  1007846000.      286.0
FUEL COMB  |           0.     50938.         0. |           0.     86537.         0. |           0.        0.0
MISC       |   214639400.    809014.       265. |   442093100.   1665171.       265. |   227453700.      106.0
--------------------------------------------------------------------------------------------------------------
           | 11134430000.  24133600.       461. | 29571430000.  48223710.       613. | 18437010000.      165.6
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  8:33 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                       |                 Proj Year = 2005                     |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   2261926   419131  5995826   850400  1269531  84.6 |   3300651   271677  8622876    72759   344436  97.1 |  -72.9
CHEM MFG    |   9029663   422308  6814311   668432  1090740  93.1 |  20271858   914907 15837728    10174   925082  97.4 |  -15.2
SURF COATG  |   1408711   394641  1728687  1210559  1605200  48.8 |   3034178   781124  3579201   105353   886477  86.6 |  -44.8
FUEL COMB   |    649795   607706   442590   433741  1041447   4.7 |    741969   667584   545340   522804  1190388   7.5 |   14.3
MISC        |    439043   281284   993342   342087   623371  56.5 |    842436   523858  1711016   154550   678408  73.4 |    8.8
---------------------------------------------------------------------------------------------------------------------------------
            |  13789138  2125070 15974756  3505219  5630289  81.1 |  28191092  3159149 30296160   865640  4024790  93.1 |  -28.5
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  8:33 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980             |           Proj Year = 2005             |
ID          |         Cost    Emis Red     Cost Eff |          Cost    Emis Red     Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |  6192942000.    6988221.         886. | 20494270000.   11579090.        1770. | 14301330000.       230.9
CHEM MFG    |  4374478000.   14753230.         297. | 10394440000.   35184500.         295. |  6019958000.       137.6
SURF COATG  |   352367600.    1532198.         230. |  1621251000.    5726902.         283. |  1268883000.       360.1
FUEL COMB   |           0.      50938.           0. |           0.      96920.           0. |           0.         0.0
MISC        |   214639400.     809014.         265. |   495476100.    1875044.         264. |   280836700.       130.8
--------------------------------------------------------------------------------------------------------------
            | 11134430000.   24133600.         461. | 33005430000.   54462460.         606. | 21871010000.       196.4
```

```
Results of Emission Projection for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  8:49 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
---------------------------------------------------------------------------------------------------------------------------------
Ind Cat     |                Base Year = 1980                       |                 Proj Year = 2010                     |
ID          | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC | Unc Attn Ctr Attn   Unc NA   Ctr NA  Tot Ctr    LOC |   %Chg
---------------------------------------------------------------------------------------------------------------------------------
PETROLEUM   |   2261926   419131  5995826   850400  1269531  84.6 |   3589190   252244  9339191     9162   261406  98.0 |  -79.4
CHEM MFG    |   9029663   422308  6814311   668432  1090740  93.1 |  22835586  1027572 18002932        0  1027572  97.5 |   -5.8
SURF COATG  |   1408711   394641  1728687  1210559  1605200  48.8 |   3431962   868443  4070568        0   868443  88.4 |  -45.9
FUEL COMB   |    649795   607706   442590   433741  1041447   4.7 |    754943   671812   564419   538962  1210774   8.2 |   16.3
MISC        |    439043   281284   993342   342087   623371  56.5 |    951502   599365  1896249   164032   763396  73.2 |   22.5
---------------------------------------------------------------------------------------------------------------------------------
            |  13789138  2125070 15974756  3505219  5630289  81.1 |  31563184  3419436 33873360   712156  4131592  93.7 |  -26.6
```

```
Results of Cost Analysis for All Regions
Radian/EPA Volatile Organic Compound Model (VOCM) -  Version 1.8 - 6/23/87 - Time of Run:  8:49 PM, Tuesday August 25, 1987
Defaults:  Growth = 0.0   %     Retire Rate = 5.0   %     Attn Fraction = Base Yr Fraction
--------------------------------------------------------------------------------------------------------------
Ind Cat     |          Base Year = 1980             |           Proj Year = 2010             |
ID          |         Cost    Emis Red     Cost Eff |          Cost    Emis Red     Cost Eff |      Abs Chg    Prct Chg
--------------------------------------------------------------------------------------------------------------
PETROLEUM   |  6192942000.    6988221.         886. | 22555600000.   12666980.        1781. | 16362660000.       264.2
CHEM MFG    |  4374478000.   14753230.         297. | 11717320000.   39810940.         294. |  7342846000.       167.9
SURF COATG  |   352367600.    1532198.         230. |  1891844000.    6634086.         285. |  1539476000.       436.9
FUEL COMB   |           0.      50938.           0. |           0.     108588.           0. |           0.         0.0
MISC        |   214639400.     809014.         265. |   545500400.    2084355.         262. |   330861000.       154.1
--------------------------------------------------------------------------------------------------------------
            | 11134430000.   24133600.         461. | 36710270000.   61304950.         599. | 25575840000.       229.7
```